

MICHIGAN FARMER.

Devoted to Agriculture, Horticulture, the Mechanic Arts, and Rural and Domestic Affairs.

SEMI-MONTHLY.

Perfect Agriculture is the foundation of all Trade and Industry.—Liebig.

NEW SERIES.

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For the Michigan Farmer. The Chess Question.

RAISIN, 6th Mo. (June) 16th, 1849.

FRIEND ISHAM:—Having been absent from home nearly the entire period since the reception of the 11th number of the "Michigan Farmer," I had not until very recently found time and opportunity to read it, and was not aware that an essay was expected from me on the subject of chess. I had not written any thing, and have no wish to enter into a paper controversy on that or any other subject. It is true that when in Detroit last month, I expressed to some of the Executive committee of the State Agricultural Society, my regret that the Editor of an agricultural paper, and of one too, that I felt some pride in believing would not only be highly beneficial to the farmers of Michigan, but a credit to our state, should voluntarily enroll his name among the believers in the unsound and unprofitable doctrine of the transmutation of wheat, and hazard the assertion that such a position "may be triumphantly sustained," and that those who disbelieve in the doctrine are generally such as "rant against book farming;" whereas, the undoubted fact is, that almost, if not all, the most able and really scientific agricultural writers of the last 25 years, the very fathers, (if we may so speak) of book farming, have opposed the doctrine, and some of them even offered premiums of 50 and 100 dollars for one single positive proof, of such change.

Now, if the doctrine may be so easily and triumphantly sustained, why is it that no such proof has yet been produced? I know it is very common for farmers to say it can easily be done: for instance, a pretty extensive farmer, of my acquaintance told me some 16 years since that he had tried and seen and knew it was so, and would give me satisfactory proof of such change by permitting wheat to grow until I could discover the head already formed and then cut it off, or allow it to be eaten off by cattle or horses, and convince me that the very stalk that was previously producing a head of wheat would, in its next effort, produce only chess. Now, although we have lived neighbors ever since, and he has rais-

ed some hundreds of bushels of chess on his farm, he has as yet failed to show me even the shadow of positive proof of his theory in that or any other way, and thus have I found in every case that has come under my observation or within my knowledge, where the methods described by the believers in transmutation as having succeeded in producing chess from wheat, have been subjected to the test of careful and accurate experiment; even under the supervision of those who assert their potency they have proved total and entire failures. But supposing the doctrine were not contrary to the established laws of nature, and that we could demonstrate it to be true, what more could we hope to gain thereby than he who should succeed in proving that there was no Almighty Creator, of Heaven and Earth, to control the operations of the Universe, and that man was not an accountable being, and thus remove the restraints of conscience over his actions; for is it not a truth admitted by all observing farmers that he who believes the *only sure way* to prevent wheat turning to chess is to thoroughly rid the ground of all the seeds of chess, and then sow none with his wheat, is far less liable to raise it than he who believes that although he should take ever so much pains to have his ground and seed clean, yet it may after all turn to chess. I think I should hazard nothing in asserting that however much any man's time may have been devoted to scientific pursuits, Botany has not been one of the branches thoroughly pursued, while he can believe that wheat, (*Triticum hybernum*) and chess (*Bromus Secalinus*) can grow from the same seed. Nature operates by fixed and established laws: precisely similar circumstances will always produce similar results, otherwise all things would soon run into confusion. There may sometimes occur apparent exceptions to a general rule, but no one supposes that because a chicken may happen to have two heads, the next egg may produce a mouse or a bat, when the most intelligent men have devoted many years to the patient and careful observation of the growth of plants from the first germination of the seed to their per-

fect maturity, and marked accurately the peculiar and distinctive features that characterize the different classes, orders, genera, varieties, &c., who have discovered that you may traverse a meridian line, from one polar circle to the other, or follow a parallel of latitude round the earth, and yet the same distinctive features, mark the same varieties of plants, wherever found, to charge such men with founding their opinions upon "theoretic reasonings" seems rather unjust, and it is no less so, to say that because we cannot in *all cases* give to those who believe in the doctrine of transmutation a satisfactory reason for the appearance of chess where they feel sure (though were all the facts and accompanying circumstances in the case known, it might appear quite otherwise to us,) that no seed of chess was in the ground. Is it any more difficult to account for the appearance of chess in the situations and under the circumstances they describe, than to account for some other facts that are so fully authenticated and so well known to most of the readers of the Farmer, that they need no farther proof than to state them; for instance, we may go into a dense forest, 100 miles from the habitation of man and cut down and burn the timber on an acre or more of land and immediately we shall find a rank growth of fire weed (*Senecio Hieracifolius*) to spring up, although we may not be able to discover a plant of that kind any where else within a hundred miles. Do acorns and beech nuts degenerate into fireweed?

Again, when a pine forest that has been scattering its seeds beneath the shade of its lofty trees for centuries is cleared from the land, what succeeds? A dense growth of young pines? not at all, but a thick grove of oaks, in many instances without a pine among them; do the believers in transmutation suppose that the seed of the pine degenerates into oak? or do they suppose that the oak springs from the dust without a seed; if so let them examine carefully the young oaks when they first make their appearance above the ground and there may they discover the acorns that produce them. When and how were these acorns

planted there and preserved until the pines were removed, and what has become of all the seeds of the pine forest? Should any in their "theoretic reasonings," assume the ground that it is a law of Nature that the oak should succeed the pine, and therefore it will grow without seed, then may we with equal propriety say that it is a law of Nature that when the vitality of wheat is destroyed by too much wet, &c. chess will grow where it was sown, without seed. Such reasoning is "theoretic" indeed and will hardly be found in the mouth of the philosophic and careful observer of the laws that govern the natural world; but as I said before, (although I have well authenticated facts and experiments in store, sufficient, I should suppose, to convince any observing and reasonable man of the fallacy of the doctrine of transmutation. I have no wish to enter into controversy on the subject, and hope for the credit of the paper, in which I feel much interest, that the Editor will leave the proof of the correctness of his position to contributors, and not insist upon so unprofitable a doctrine himself, as he would certainly not be very likely to diminish the amount of chess raised in the state, should he succeed in establishing it.

As ever, thy friend,

J. GIBBONS.

Reply to Friend Gibbons.

BY THE EDITOR.

Friend G. says that he did not seek this controversy. All we know about it is, that we were informed by Mr. Holmes, that Mr. G., when here at the meeting of the Executive Committee of the State Agricultural Society, took exception to the casual remark which we had dropped in an unlucky moment in regard to transmutation and expressed a desire to write something for the Farmer to set the matter right, but feared we would not publish it. So much for that.

Mr. G. seems to be greatly concerned lest the reputation of the paper should suffer, and the high hopes which have been entertained of it, all be dashed, by the editor's enrolling his name against "all the really scientific agricultural writers" of the age, some of whom have offered hundred dollar premiums, &c. If there is any argument here, it is based upon the assumption that, whatever has had the sanction of really scientific writers, must be truth, and that nothing which they have believed and taught, is to be called in question, which is taking quite too much for granted; for it is a doctrine which would rob us of all the most useful improvements of the age, and throw the world back centuries. It is the mark of a truly scientific man to change his views, as new light comes in, and new data are furnished him.—It is a failing we have, that we cannot bow down to the authority of great names, and believe simply because they believe. Their opinions we respect, and a wise man will always avail himself of the light they furnish in forming his own judgment. In regard to these hundred dollar premiums, we shall have a word to say by-and-by.

And what is an editor made for? What are his duties, prerogatives and responsibilities? Ac-

cording to friend G.'s doctrine, he is made for no end at all—has no duties, no prerogatives, no responsibilities, but must be tossed to, and fro on the tumultuous sea of popular opinion, passive as a log upon the ocean; for if he may not express his opinion upon any particular subject, because some one thinks he will hazard his reputation, and if he succeeds, do more hurt than good; for the same reason he may not express his opinion on any other given subject, for what subject can he introduce upon which all will agree with him? As an exemplification of the absolute ridiculousness of such an attitude in an editor, turn over the next leaf of this very number of the Farmer, and read an article from the Genessee Farmer, on this very subject, and then tell us how much credit there is in occupying a position like that.

And how do you know, but that we have things to say, which will place this subject in a light in which you have never viewed it before, and how will you ever know, unless we are allowed to speak out? We do not claim for our opinions any consideration further than they are sustained by arguments which commend themselves to every man's judgment. And now, friend G. let us agree to put away from us all those iron prejudices which are as a coat of mail against the power of argument, dismiss all pride of opinion, and concerned only for the right, come to the consideration of this subject, with all the docility of little children, and meekly bow to the majesty of truth, upon whichever side it may be found.

And here, at the very threshold of this discussion, there is a principle to be settled, and it is a principle which is to settle the whole controversy. It is the principle of evidence. There must be some rule of evidence, or we are afloat upon uncertain seas, without compass, pilot, helm, or even the twinkling of a star. And all the rule we have, or can have, is that which obtains in courts of law. We will not proceed a step in this discussion, or suffer any other one to proceed a step in it, in our columns, aside from the recognition of this principle. But for the utter disregard to this principle, which has characterized the discussions on this subject heretofore, this vexed question would have been long since put to rest. And these hundred dollar premiums offered by "real scientific writers," the editors of our agricultural journals, and authors of our agricultural books—to what do they amount? To nothing at all, except to show the weakness, the blindness, the inconsistency, and the imbecility of the human mind. In their pride of opinion they offer premiums for any positive proof of the truth of the doctrine of transmutation, and then upon the presentation of the strongest possible proof, such as would convict a man of murder, and send him to the gallows, they have the assurance to turn coolly round, and say, "O yes, but I must see it with my own eyes before I can believe it." Turn for a moment, to the article from the Genessee Farmer, above alluded to, and see there an exemplification of this remark. An affidavit is there recorded, as made by a man whom the editor seems to recognize as a man of high respectability, and whom he calls his friend E. F., stating that in two instances he had seen with his own eyes, wheat and chess growing in the same head—and what does the editor say?

Is he satisfied? Not at all? "Only show it to us," he says, "and it will be a settler to our views on this subject, and we will give a premium for a knot hole to creep into." He acknowledges the receipt of eight ably written communications, every one of which takes ground in favor of the doctrine of transmutation, and many of them he confesses, furnish proof which he has no way to dispose of, and yet he dogmatically denounces the doctrine as "a physical, mathematical and philosophical impossibility," and declares that this conviction has such a hold of him that fire cannot burn it out of him.

What would be thought of a jury that should say, in reply to the most positive testimony of an unimpeachable witness, "we cannot be governed in our verdict by such testimony, but only show us the thing itself, show us the assassin himself, just as he is in the act of plunging the murderous steel to the heart of his victim, and it will be a settler to our views on the subject, and we will give a premium for a knot hole to creep into? But as it is, our convictions are fast hold of us, and fire cannot turn them out of us?" What would be thought of such a jury by these wise, and "real scientific writers" themselves? And how much aid we would ask, is the cause of "real science" likely to receive from the contributions of writers who are governed by such a rule of evidence, or rather by no rule at all? That the cause has received valuable aid from these same writers, we do not deny, but on other subjects, they seem to be in their senses, and write like rational men.

And here, friend G. allow us to turn the tables upon you a little, in reference to the infidel tendencies of our respective doctrines. You speak of the classifications into which the different orders of vegetables have been botanically arranged, and tell us that they will not intermix, and we are furthermore aware, that wheat and chess not only belong to different species, but to different genera, wheat belonging to the genus *Triticum*, and chess to the genus *Bromus*. These you call the laws of nature, and upon them you rest the whole strength of your argument. The doctrine of transmutation, you say, is at variance with these laws, and that to prove it, is to prove "that there is no Almighty Creator of Heaven and earth to control the operations of the Universe, and that man is not an accountable being."

Take care, friend G., take care how you forge weapons for us. It is this very doctrine, viz, the doctrine that every thing which conflicts with what we are pleased to call the laws of nature, which has constituted the strong hold of infidelity, in all ages of the world.

Have you ever read the famous infidel argument of David Hume? The miracles of our Saviour, he says, are not to be credited, because they are contrary to our experience, and that it is a more credible thing in itself, that men should tell falsehoods, than that the course of nature should change—the precise argument used by these "real scientific writers" in proof that there can be no variation in what they regard as nature's laws, when, in fact, "if they understood all the facts and circumstances of the case," they would see, that these seeming variations constitute a part of those very laws. It were well for these writers to ponder well the celebrated answer of

Campbell to this very argument of Hume. It is says he, contrary to the experience of an inhabitant of the torrid zone, that water should ever become a solid, and, according to this doctrine, he must disbelieve in the existence of ice, under any circumstances, though the whole frozen north should testify to it. He is bound to regard such a phenomenon as a high handed infraction of nature's laws, as they have come under his own observation, and as they have been worshipped and adored by all "real scientific men" of that latitude, when, if "all the facts and circumstances of the case had been known to him," he would have seen, that such a phenomena was in perfect harmony with those laws, and a beautiful exemplification of them.

This example shows how easy it is for "real scientific men" to be mistaken as to what are nature's laws, and how ridiculous they can make themselves, when they undertake to place what they call the laws of nature, above the God of nature, who delights "to confound the wisdom of the wise" by just such playful deviations from the usual course of his providence as the one under consideration. It is thus, that the great architect of nature, rebukes the Deifiers of his laws, and pours derision upon their pride.

But in regard to these boasted laws of nature, how is it—is botany a perfect science? Is there nothing more to learn in its fields of investigation? Do *all* the laws of the *whole* vegetable world harmonize with the laws which this science recognizes as the laws of nature. Contrariwise, is it not true, that however *great a botanist* a man may esteem himself to be, and however familiar with the laws of nature he may suppose himself, there comes along occasionally a vegetable, knocking at the door of his system, which he is at an entire loss how to dispose of? And is it not true, that in every new book that is published on the subject, there are variations to correspond with the advance which has been made in the discovery of nature's laws?

You say that nature furnishes no analogy to this doctrine. Be it so, what then? Are we to reject the evidence of our senses, rather than believe it? Are we to trample under our feet all the ordinary rules of judging to get rid of it? If you were desirous of proving that there never was such a being as Jesus Christ, and "that there was no Almighty Creator," &c., how could you more effectual do it? Be it admitted then, that this case stands alone, there is no alternative but to judge of it by the same rules of evidence which govern us in other matters, or cast ourselves afloat upon the troubled sea of infidelity. We put it to your good sense, if it be not so.

But are you quite sure, that nature furnishes no analogy to this doctrine? Come, go along with us to the wheat field—and what do you see? Do you say you see nothing analogous? Look again, and if you still see nothing, go into another field, and keep going from field to field, and, our word for it, if you persevere, you will meet with an instance of transmutation which is ten times more at variance with the supposed laws of nature than the one in question, viz the transmutation of wheat into smut. If there is any failure in the analogy, it is, that, in the latter case, the transmutation is far greater than in the former.—But upon looking into your botany and finding no

clue, no family likeness to this anomalous vegetable production, will you therefore conclude, "that there is no Almighty Creator of Heaven and earth" &c. We think better of friend G. than that.

We thank you for those illustrations which you have pressed into service, for they belong to and make a part of our argument. That fireweed and oaks should spring up and grow under the circumstances named, is wonderful—aint it? Certainly it is, and entirely aside from all our conceptions of the laws of nature. And you are right, friend, in not being driven by these apparently conflicting phenomena, to the conclusion "that there is no Almighty Creator of Heaven and earth." And suppose we succeed in establishing the doctrine of transmutation, would it not be just as christian-like to bring a little faith into exercise in this case as in the other?—Would it not be just as christian-like to believe that if all the facts and circumstances of the case were known, there would be just as little conflict with the established laws of nature in the one case as in the other? And that two headed chicken—what will you do with that in this connection?

We confess that we are unable to see the bearing of these illustrations *against* the doctrine of transmutation. The *design* of them seems to be to show that the soil, all the world over, for aught we know, may be chuck full of chess seed, lying in a dormant state, and that cultivation causes it to germinate. But who ever heard of a crop of chess springing up upon the removal of a forest a hundred miles, or even one mile from the habitation of man? Nay, who ever heard of such a thing even in an old, cultivated country, except in fields devoted to wheat husbandry? Who ever heard of it in those portions of the rich bottom lands of the Scioto and the Miamies where no wheat was never raised, and which have been devoted to the cultivation of Indian corn, in some cases, every year for forty years in succession? Who ever heard of such a thing in those parts of the south, where nothing but cotton, Indian corn and sweet potatoes, are ever raised? But we must restrain ourselves.

And if the doctrine of transmutation be true, can it be *unprofitable*? Is it to be admitted, for a moment, that any truth is unprofitable? And how is this doctrine unprofitable? It seems to be taken for granted by friend G., that those who believe it to be true, consider it a matter of no consequence whether they sow clean seed or foul. Because some vagabond some where in the world, has asserted, that the seed of chess will not germinate, therefore the whole body of believers in the doctrine of transmutation are supposed to entertain such a belief—than which nothing can be more palpably erroneous and unjust; and we do here, in the name of the great body of the believers in transmutation, throw back this imputation as a gratuitous and unfounded calumny. It is a doctrine with these people, that the more chess seed they sow with their wheat, the more chess they will have, and that if they would have a clean crop, they must sow clean seed. What motive to negligence in this respect then is furnished by this doctrine?

The truth is, that the belief in this doctrine has the directly opposite effect, the effect to clean

our wheat fields from this pest, a pest which may be regarded, to some extent at least, as the penalty affixed to bad husbandry, such as sowing foul seed, neglecting to drain wet lands, suffering the wheat to be trodden down when young, or eaten off after being headed, &c. And a wise man will regard this phenomenon as the voice of providence, rebuking him in thunder tones, for neglecting his appropriate duties as a tiller of the soil.

But we retort this grave charge upon our friend, and say to him, that he will do well to clear his own skirts of it. If the earth is as full of chess seed as he would make us believe, and it lies dormant in old cultivated fields, until a crop of wheat happens to be put upon them, when, all at once it takes a notion to be quickened into germination, or just enough of it to spoil the crop, sufficient being reserved in the ground to germinate on any future occasion—if this be so, then what encouragement have we to try to rid the soil of it, as he admonishes us, if we would have a clean crop of wheat? Surely, friend G., your doctrine has *unprofitableness* written, in staring capitals, upon its very forehead.

But we find ourselves at the end of our limits, and must stop short, just as we are getting warmed up in the argument, and just as the subject is beginning to open upon us. The thoughts we have thrown out above, have been penned in great haste, and without having been subjected even to revision, yet we think they contain the substantial truth, and will stand the test of a careful examination. They are the result of much observation and reflection.

We regret the necessity which has brought us in collision with a prominent member of the Executive Committee of the State Agricultural Society, and one of the very best friends the Michigan Farmer ever had. And certainly, we would as soon bow to his opinions as to those of any living man. However, we have no fears of friend G. His ingenuousness, his love of the truth, wherever found, will triumph over all personal considerations. A failure to make out a case against transmutation, is no disparagement to any man's talents, for it is his misfortune rather than his fault, and betrays the weakness of of the cause rather than lack of ability.

And now, we commend to the special consideration of the reader, the article from the Genesee Farmer upon the next page, to which repeated allusions have been made in these remarks.—In the foregoing, we have done little more than attempt to brush away the dense fog which has hitherto settled around this subject, and thus let in upon it the sun-light of truth. We have scarcely touched upon the positive evidence which we designed to introduce, being willing to rest the proof, for the present, with the article alluded to; and all we ask of the reader is, that he make a candid application of the principles which we have here endeavored to settle, to the positive and incontestible proof furnished in that article. Read it, read it, *read it*—and as you read, just cast an eye of pity on the editor struggling against the convictions of his own mind, in view of the incontestible evidence before him. By the way, what are those three strong cases, which, "if there were no deception, and no hidden causes to account for them, would be a settler to his views!" But let them pass, and all the rest, and take only the affidavit of Mr. Barrett.

P. S. Since the above was written, our attention has been called to an article in the July No. of the Albany Cultivator in which our unlucky little paragraph is noticed and the proof of the doctrine of transmutation asked for. In reply, we refer the editors of that journal to the foregoing remarks in connection with the following article from the Genesee Farmer.

After reading the aforesaid article from the Genesee Farmer, see an article on the 218th page, in the present number of the Farmer, in which we endeavor to account for and obviate certain difficulties attending the investigation of this subject.

From the Genesee Farmer.

Chess--Transmutation.

We have before us eight well written communications on the transmutation of wheat into chess or chess. It is a subject we dare not again open our pages to, as it is interminable, and we almost regret having published Mr. W.'s article in our March number.

Let us premise that we think the transmutation of vegetable, animal, or any material substance, is philosophically, physically and mathematically impossible—and that opinion fire can't burn out of us, until we can see a plain and indisputable instance to the contrary. And yet we admit there are some facts which cannot be explained, that seem to favor that doctrine, and it requires a little faith sometimes to keep us from being skeptical on the subject. All of our communications are from experienced and practical farmers, and every one takes the affirmative.

H. W., of China, N. Y., cites instances where wheat in the spring was cut to feed a traveler's horse, which came entirely chess, while the rest of the field was fine clean wheat. M. T., another instance, where a horse was tied in the corner of a fence, and eat the wheat to the length of his tether, and that was chess alone. These are not solitary instances of the like.

J. R., of Pekin, Niagara Co., says he has the ability to convince the most skeptical, and asks if, the \$100 premium is yet alive, or the man that offered it; as he is prepared to carry off the prize, and desires us to name some one in that county to call on him to have it settled at once. We take that bet.

J. A., of Yates county, states some strong reasons which he thinks are conclusive; but we think his reasoning unphilosophical when he applies it to the planting of a vineyard of choice grapes, which turned to wild ones. If the seeds were planted, then a variety might be expected, but not a different order and genus—and no one will pretend but what cuttings of rooted vines, will produce the same as the parent plant forever.

L. R., of Clyde, relates three very strong cases, which, if there were no deception or hidden causes to account for them, would be a *settler* to our views on the subject.

"A subscriber," of Oakfield, is rather severe on Mr. W., and asks if pigeons are more apt to disgorge chess on ashes where logs and stumps have been burned, than other places, as those places are usually full of chess. He also says that clean seed, that had chess growing among it, is more liable to produce chess than that that had not any, and therefore not impregnated with the pollen of the chess—a suggestion that may be worthy of notice, and as far as we are informed, is original with our correspondent.

And last, though not least, comes our friend E. F., of Rose, Wayne Co., with several cases of transmutation, which are difficult to account for, without ocular exami-

nation. He winds up the "proof positive," by the following certificate, duly sworn and subscribed:

"This may certify that I, Simeon J. Barrett, of the town of Rose, county of Wayne, about twenty-four years ago, in the fall of the year, in picking over some wheat to thrash for seed, pulled out some chess and found it grew in a wheat head of the usual length, and seven kernels of the chess grew out of one side of it, about one-third of the way up. In July, 1848, I was passing through a field of wheat and saw a head of wheat with chess on it; I plucked the head, which was of usual length, and about half way up the head, there grew out eleven kernels of chess.

SIMEON J. BARRETT.

The above statement was verified before me the 7th day of April, 1849.

P. GUITCHELL, Justice."

Now, in order to set this subject at rest, exhibit to us this *lusus naturae*, this *rara avis*, and we will cry *pecavi*, and give a premium for a knot-hole to creep into, and forever after hold our peace.

We must beg our correspondents to excuse our not giving their entire article, and to let this mooted and unsettled question rest until some proof can be adduced beyond cavil or dispute.

A voice from Washtenaw.

The following letter from one of the most intelligent farmers in Washtenaw County, came to hand after the reply to Mr. Gibbons was penned, and though the writer states, that it was not designed for publication, we cannot resist the temptation to give it. We will simply add, that Mr. Anderson is not a subscriber to the Michigan Farmer, but is a subscriber, of long standing, to the Albany Cultivator:

ANN ARBOR, July 7, 1849.

EDITOR MICHIGAN FARMER, SIR:

In one of the June numbers of your paper which some one handed me, I noticed an article from the pen of Judge Witherell on the transmutation of wheat to chess.—When I first saw the article, I was about dropping you a line to say, that the editor of the Albany Cultivator would be down upon you for entertaining opinions so much at variance with his. The pressure of business prevented, and it escaped my mind until the July number of the Cultivator came to hand, when, lo & behold! as I expected, there I found his article ridiculing the idea of transmutation, and he wonders in perfect astonishment, that any farmer is so ignorant as to believe such doctrine.

Now we are equally surprised that the Cultivator should persist in promulgating a theory that is contradicted by incontestible facts, facts proved by the testimony of our

senses. So far as I am concerned, I always sow clean wheat; not a particle of chess but is blown out by three times running through the mill. Some seasons we have considerable chess, and some seasons none. This year I have not noticed a single stalk in my wheat. Other farmers whose wheat has been sown on unfavorable wet ground, have some chess.

Some years ago, I had twenty acres of chess, which I mowed for fodder; twenty bushels of wheat could not have been picked out of the whole.

The Cultivator quotes scripture. The farmers of old had little experience in such matters, and then he says, why dont you raise chess? The fact is, there is, in addition to wet land, something in the season, either in the spring or fall, that changes wheat to chess. We know this because we see it. We know by our senses that chess grows among the wheat where not a particle of chess had been sown. Can the Cultivator tell us why wheat and corn grow when placed in the soil: we all know they do grow in favourable positions: let him quote the text of scripture relating to placing the grain in the ground.

The editor of the Cultivator may argue this question, and ridicule the doctrine of transmutation as much as he pleases, he cannot convince those that know better by experience. Stand up to the Cultivator on this subject; dont yield a hair to such exploded theory. The Cultivator several years ago, offered one or more premiums to any one that would grow chess from wheat. Call upon him to state the amount of premiums and whether the money will be forthcoming, when the chess is raised.

Respectfully yours,

WM. ANDERSON.

For the Michigan Farmer.

Swamp Muck.

FRIEND ISHAM:—As much has been said about swamp muck, or bog peat, as a manure, I will give an account of what I have seen and done with it. About 4 years ago, I planted cabbage in an open field, which was plowed and well manured with the black soil from a swamp. The crop of cabbage proved to be excellent.—I saw a thin coat of this soil strewed over a meadow, which caused the crop to grow greener than common, and more abundant. It is also very good for celery when put in the trench about 6 or 8 inches deep; in fact, it is good for all kinds of vegetation, and the surface of the soil is the place which nature has decreed for it, and not the swamps and frog ponds, and now is the season to collect it.

SINENSIS.

For the Michigan Farmer.

Fruit Prospects, &c.

ANN ARBOR GARDEN, July 4, 1849.

MR. ISHAM:—The past winter having been unusually severe upon most kinds of fruit and fruit trees, has called forth several communications which have appeared in the Farmer. Each writer appears to assign causes and gives what he supposes to be proof positive why so many plum trees have died, and why there is such an almost entire failure in peaches. For ought I know, the several reasons given are valid as to the localities of the writers, but facts coming under my own observation have disproved them all, as far as the operation of particular causes as given, have affected the trees and fruit in this vicinity.

Plum trees have suffered most. In some gardens three fourths of the trees are dead, while in others nearly adjoining, scarcely one is killed, and in many instances, trees that blossomed and put forth their leaves, and fruit set, are now dying. I have no reasons to give satisfactory to myself, but as far as my observation has extended, I am inclined to the opinion that in all locations in which the trees have been exposed to the North West winds, they are most affected. I judge so from the fact that of all the trees that I have examined, those on the North West and West sides, showed symptoms of decay first, by the bark becoming black, in some cases from the ground to the branches, in others in detached spots. What trees survived the winter, put forth blossoms abundantly, and set fruit, which no sooner done than the curculio, that enemy to all smooth skinned fruit, came in legions. Not satisfied with one nibble, they seemed determined to have the whole. Some plums, embracing one fourth part of their entire surface, are eaten, and from enquiry it is doubtful about there being a bushel of good plums in our county. They are now nearly all dropped from the trees. The most effectual way to get rid of the critter is to either pick up the plums, *all of them*, and feed them to the hogs, or turn the hogs into the fruit yards to eat the plums as they fall. The latter cannot always be done without injury to gardens, and the former will only be effectual by adopting the plan. As I know by experiment, the curculio will fly up into the trees. Other writers to the contrary notwithstanding. And all individuals who are contemplating setting out fruit yards should make their plans so that

the pigs can be of some service by eating the falling fruit.

Peach Trees were less killed the past winter than usual, while the fruit buds were nearly all destroyed. There are but few locations in our county where any peaches can be expected, and those favored spots are not confined to particular soils, or aspects, although soils inclining to clay appear to have now most peaches on the trees. The most peaches I have noticed this season, are on trees in stiff gravel and clay soils, covered with thick sward. I am told that on the borders of some lakes, and on the high ridges of sand are some peaches. I have been experimenting for several years to discover the cause of the failure of peaches without success. I have had but two crops of peaches in nine years. The most I have this year will be on *one tree*, on a northern aspect, sandy soil, and stiff sward. The peach worm affects the trees less on sward than when the soil is hoed often, but the most sure way is to put around the body of the trees about a peck of ashes leached or unleached. I prefer the latter, or lime is just as good.

I have, for several years, adopted the shortening in mode of pruning, on a part of my trees, with the same result as to fruit, but the beauty of the trees are much improved.

The fruit buds of my peaches have generally been killed as early as the middle of January, and, I have observed no difference on trees that grew rapid late in the fall, or those which grew less. Peach trees have been affected this season by what appears to be the worm of an insect. About the first of June, the leaves began to be of a reddish yellow color, and much wrinkled, and began to dry, and are now dropping from the trees.

Grapes have not escaped the ravages of the winter. Our native varieties, the Issabelle, Catauba and Alexander, have been severely winter killed. Wood of four and five years growth, has been destroyed, and a singular fact in connection, is that the east and west sides of the vine were killed while the north and south were left apparently untouched. In most cases, the vines were so much injured that we have but little fruit, and that so late that present appearances indicate that few bunches, if any, can ripen before severe frosts. My native grapes were more injured than some foreign varieties.

Apple Trees, which put forth an abund-

ance of blossoms last spring, have but little fruit. Trees generally blossomed less than usual, yet we anticipated a fair quantity of fruit. Most of it blasted, and quite a proportion of what fruit set, is now falling from the trees. We cannot expect in this county more than one twentieth part of the apples we had last season. I have noticed that most of the apples are on low suspended branches, the north side excepted.

Apricot Trees have shared the same fate with plums: many trees which have been bearing for years, are dead, and the fruit or what was left, the curculio claimed and unceremoniously took.

Nectarines are so nearly allied to peaches that what affects the one affects the other.

Pears, for some cause that I cannot assign, have not been injured, the tree or fruit, as has been the case with most other kinds of fruit trees. The quantity of pears is generally small in this county, though this year we shall have as many as usual in proportion to the number of trees. And why it is that our farmers do not cultivate more pear trees I cannot tell. They will bear as young as an apple tree when grafted or budded on good stocks.

Cherries of the different varieties bid fair in the spring to furnish a good supply of fruit, but the curculio or some other insect, has destroyed the cherries, and nearly all have dropped from the trees. Our common red cherry has not escaped.

Quinces are as productive as they generally are. Our farmers and citizens have done well in cultivating quinces, from which they are now receiving their reward in fruit.

In the absence of other fruit, we must resort to the smaller and more neglected kinds, such as Gooseberries, Raspberries, and Currants, of which we have a very fair supply. Gooseberries have not mildewed this year as they have done in former years. I have several kinds of smooth gooseberries under cultivation, which with me have never been subject to mildew and bear most abundant crops.

S. B. NOBLE.

For the Michigan Farmer.

Inquiry.

FLUSHING, May 2, 1849.

If any of the correspondents of the Michigan Farmer could explain to me the cause of the liver of the sheep to rot, which has caused the death of many of mine—And also a remedy to prevent it, they would oblige a brother farmer.

SINENSIS.

HORTICULTURAL.

J. C. HOLMES, EDITOR OF THIS DEPARTMENT.

Work for the Gardner.

Where Grape vines are overloaded with fruit, cut off some of the bunches and thin the berries on the remaining ones. The fruit will be larger, will ripen better, and be more delicious than if the vine is permitted to ripen a very large crop.

If mildew makes its appearance upon the grapes, dust powdered sulphur upon and beneath the vines. The same with gooseberries, should mildew attack them.

Bud Roses, commence budding Plums and Pears immediately. Cherries may be budded the last of this month or the first of next.

A freak of Nature.

Mr. Powell Hallock, of Livonia, has presented us with a shoot of a Peach Tree not more than six inches long, which has upon it between two and three hundred peaches measuring from an eighth to half an inch in diameter. Mr. Hallock says the tree from which this shoot was taken, always bears its fruit in this manner and shows no blossoms. A botanist would tell Mr. H. that he is mistaken, so far as the blossoms are concerned; for upon examination we find a very large calyx filled with numerous little peaches, the centre, or pistillate fruit measuring half an inch or more in diameter, and the surrounding or staminate peaches much smaller, and still surmounted with the dried stamens; and the petals, instead of showing themselves as such, have also endeavored to form fruit, but have made such a blundering piece of work about it, that had they shown their true colours in due season, the tree would not have been charged with not blossoming. The centre, or pistillate fruit always matures, while the others drop off.

Will Mr. H. please forward us a few buds from this tree about the first of September next? We wish to propagate it as a curiosity. We have also received from Mr. H. a communication on the peach tree. He says that in the fall, he removes the earth from the top roots of his peach trees and covers them with snow and water, in order to form a body of ice about them.—His trees which are treated in this manner bear full crops, while those in the vicinity, not prepared in this way do not bear at all.

Currant and Blackberry Wine.

We do not intend to advise the free use of wine; but for the benefit of those who

wish to take an occasional glass for the stomach's sake, we recommend the following recipe as being the very best for the manufacture of either currant or blackberry wine.

To one quart of currant juice, add two quarts of water and 3 lbs of brown sugar. Put it into a keg and leave the bung loose until it is done fermenting. One year from the time of making, it may be bottled and will be fit for use. White currants make a lighter colored wine than red.

Blackberry wine made after the above recipe, we think, is the most delicious wine we ever tasted. Never add spirits of any kind, for it would spoil it.

Cherry Tree Slugs.

That miserable, crawling, slimy, insect, the slug, is doing much damage in our gardens, by destroying the foliage of the cherry and Pear trees, and in some instances the Quince.

We have tried many experiments in order to destroy them. The most effectual is either whale oil soap or lime. Take one pound of whale oil soap and dissolve it in one quart of boiling water, when dissolved, add four gallons of cold water and sprinkle it upon the trees with a common water pot. If it falls upon the slugs it will destroy them immediately. An easier method of destroying them, is to dust lime upon them in the morning while the dew is upon the leaves. It would be well to over them the second time, for some may escape the first dusting. The following we take from Browne's Trees of America:

"But by far the most pernicious enemy to the common cherry-tree is the slug-fly, *Blennocampa cerasi*, of Harris. He describes the perfect insect, in his "Report," as being "of a glossy black colour, except the two first pairs of legs, which are dirty yellow or clay-coloured, with blackish thighs and the hind-legs, which are dull black with clay-coloured knees. The wings are somewhat convex, and rumpled or uneven on the upper side, like the wings of the saw-flies generally. They are transparent, reflecting the changeable colours of the rainbow, and have a smoky tinge, forming a cloud, or broad band across the middle of the first pair; the veins are brownish. The body of the female measures rather more than one fifth of an inch in length; that of the male is smaller. In the year 1828, I observed these saw-flies, on cherry and plum-trees, on the 10th of May; but they usually appear towards the end of May or early in June. Soon afterwards; some of them begin to lay their eggs, and all of them finish this business and disappear, within the space of three weeks. Their eggs are placed, singly, within little

semicircular incisions through the skin of the leaf, and generally on the lower side of it. * * * On the fourteenth day afterwards, the eggs begin to hatch, and the young slug-worms continue to come forth from the 5th of June to the 20th of July, according as the flies have appeared early or late in the spring. At first, the slugs are white; but a slimy matter soon oozes out of their skin and covers their backs with an olive-coloured, sticky coat. They have twenty very short legs, or a pair under each segment of the body, except the fourth and the last. The largest slugs are about nine twentieths of an inch in length, when fully grown. The head, of a dark-chestnut colour, is small, and is entirely concealed under the fore-part of the body. They are largest before, and taper behind, and in form somewhat resemble minute tadpoles. They have the faculty of swelling out the fore part of the body, and generally rest with the tail a little turned up. These disgusting slugs live mostly on the upper sides of the leaves of the pear and cherry-trees, and eat away the substance thereof, leaving only the veins and skin beneath, untouched.

The slug-worms come to their growth in twenty-six days, during which period they cast their skin five times. Frequently, as soon as the skin is shed, they are seen feeding upon it; but they never touch the last coat, which remains stretched out upon the leaf. After this is cast off, they no longer retain their slimy appearance, and olive colour, but have a clear yellow skin, entirely clear from viscosity. They change also in form, and become proportionably longer; and their head and the marks between the rings are plainly to be seen. In a few hours after this change, they leave the trees, and, having crept, or fallen to the ground, they burrow to the depth of from one inch to three or four inches, according to the nature of the soil. By moving their body, the earth around them becomes equally pressed on all sides, and an oblong-cavity is thus formed, and is afterwards lined with a sticky and glossy substance, to which the grains of earth closely adhere. Within these little earthen cells or cocoons, the change of the chrysalides takes place; and, in sixteen days after the descent of the slug-worms, they finish their transformations, break open their cells, and crawl to the surface of the ground, where they appear in the fly form. These flies usually come forth between the middle of July and the first of August, and lay their eggs for a second brood of slug-worms. The latter come to their growth, and go into the ground, in September and October, and remain till the following spring, when they are changed to flies, and leave their winter quarters. It seems that all of them, however do not finish their transformations at this time; so that, if all the slugs of the last hatch in any one year should happen to be destroyed, enough of a former brood, would still remain in the earth, to continue the species.'

H. Wheatland, Esq., of Salem, Mass., will please accept our thanks for a copy of the 12th Annual Report of the Board of Education of the State of Massachusetts. Also the transactions of the Agricultural Societies of Massachusetts for the year 1848. The following we take from the report of the Middlesex Society. We recommend it to our readers, as being as applicable in Michigan as in Massachusetts, in every particular except the stones.

From John Gordon, Brighton.—In the piece of land occupied by me, as a fruit garden, there is about two acres; nearly three-fourths of it is a light, sandy loam, the sub-soil is mostly a yellow loam. The other part, when I commenced laying out my garden, in the spring of 1842, was composed of a stiff, clayey substance. I should think that a considerable part of it was the wash from the road, with a sub-soil so hard that I had to use a pick to stir it. I have, for the last four years, spaded it every spring and have gone a little deeper every year.—When I set out my trees, I dug a hole about 2 feet deep and 3 feet wide, and have, usually, put from one to 2 wheelbarrow loads of compost manure to each tree, and a good dressing of manure every spring. I have, in this piece, about 40 apple trees, 60 peach trees, 40 plum, and 400 pear trees. About half of the pears are on quince and the rest on pear stocks.

I have another piece of land, on which there is about 66 apple and 70 peach trees. This land, in 1840, was, most of it, very rough, and I considered most of it hardly worth cultivating. I think it cost me from 1 to 2 hundred dollars to dig, blast, and carry off the stones. Some of them were so large, that it took a number of loads of gravel and loam to fill their places. I then spread a good coat of manure, and ploughed it in as deep as I could, and have manured it well every year since.

I headed in the apple trees, four years, and the peach trees, three years. I have endeavored to keep them as free from insects, as I could spare time to do. I have twice used a wash, composed of 7 lbs. of potash, $\frac{1}{2}$ peck of lime, and $\frac{1}{2}$ bushel of cow dung, mixed in a barrel of water. After examining, by scraping and digging out the borers, I have put coal and wood-ashes mixed, around most of my peach trees, every spring.

The committee cannot close their Report without referring, in terms of the highest approbation, to the fruit garden, or, more properly, farm of John Gordon, of Brighton, and commending it to the notice of all the fruit-growers in the society, as a model for imitation. Some of the finest specimens of the apple and the peach, which came under our notice, were on his premises; and his pear and plum trees were the only specimens of these fruits which have been deemed worthy of a premium.

For the Michigan Farmer.

TO THE EDITOR OF THE MICHIGAN FARMER:—You would oblige me very much if you would inform me through the columns of your paper, how I can prevent the ravages of the rose bug. This insect has proved a great annoyance to me, entirely destroying all my roses, except a few of the earliest varieties. Not content with ruining my beautiful crop of roses, they next attacked my cherry trees, destroying the leaves on the young branches, giving them the appearance of having been nipped by the frost. They are now destroying my peaches, by eating them until they fall to the ground. I have tried every thing I could think or hear of to prevent their ravages, with no beneficial result. I hope some experienced gardener or horticulturist will be able to give directions for destroying this pest of the flower garden and orchard. I would also like to know the best method of destroying rats, or for driving them from barns, cellars, &c. Can you give me light? L.

Berrien Co., July 3, 1849.

The most expeditious and efficacious method yet known of destroying the rose bug, is to pick them off by hand, and scald or crush them to death. They are a great annoyance in light sandy soils. Upon heavy soils they are not so troublesome.

If our correspondent finds the rose bug upon any thing besides his roses, we advise him to try the receipt which he will find in the Horticultural department of the last number of the Michigan Farmer.

We suspect he is mistaken when he says the rose bug is eating the leaves of his cherry trees, and destroying his peaches.—Should he find it to be the slug that is at work upon his cherry trees, he will find this insect described, and a remedy for it in another column of this paper. It may be the curesio that has attacked his Peaches. If so, there is no remedy for this season.—They have done their work, and the fruit is lost. Please let us hear a little more particular from you upon this subject, after you have examined the insects and tried the remedies we prescribe.—Ed.

For the Michigan Farmer.

Hardy Raspberries.

MR. ISHAM:—In No. 12 of the present volume of the Farmer is an article headed as above, in which it is stated, that complaints are made of the want of a good hardy Raspberry, and that the Antwerps are generally killed to the ground. Although the last winter was unusually severe on many kinds of fruit, my red and white Antwerps were but little affected by the winter, and the red variety bids fair to yield a fair crop.

I have had, for several years, under cultivation a variety of Raspberry which I obtained from an English family who brought it from England, which is perfectly hardy. I do not remember an instance in which it has been winter-killed. It is a rapid grower, and yields an abundant supply of large cream colored berries, which are first best.

S. B. NOBLE.

Ann Arbor, July 2, 1849.

For the Michigan Farmer.

To get new varieties of Fruit by Impregnation.

Provide yourself with a pair of small scissors, a hair pencil and a gauze bag; then with the scissors deprive the flower from which you wish to raise seeds, of its stamens before the pollen is ripe; and with the brush collect the pollen from the flowers with which you wish to impregnate, and dust it upon the pistils of the flowers you have prepared, and cover them with the gauze bag, to keep the insects from depositing other pollen on the flowers.

SINENSIS,

FLUSHING, Mich., May 1849.

For the Michigan Farmer.

Asparagus.

MR. EDITOR:—

I hope your correspondent, A. H. K., who hails from Fentonville, and has been "living on Asparagus" for some time, will be prepared soon to give the readers of the Farmer the modus operandi in making his asparagus bed. There is quite a diversity of opinion as to how the bed should be made and the plants set out, and not so much as to thin dressing. While he has been fattening on asparagus, some of your readers have been growing quite lean.—Will he also give us his proper name.

S. B. NOBLE.

Ann Arbor, July 2, 1849.

For the Michigan Farmer.

Michigan State Agricultural Society.

Corresponding Secretaries of the Michigan State Agricultural Society are requested to make immediate efforts to obtain members to the society.

We want to enroll one thousand names previous to the 1st of September next, and as many more as possible. We understand there are many persons who wish to become members but do not know what course to take.

All that is required, is to forward the name of the person together with his Post office address and one dollar to either of the corresponding secretaries, or to the treasurer, Hon. John J. Adam, at Lansing, or to the Recording Secretary at Detroit.—The citizens of Detroit have subscribed a large sum to defray the local expenses of the Fair. It will therefore be held at Detroit on the 25th, 26th, and 27th of Sept. next.

J. C. HOLMES.

July 10th, 1849. Sec. M. S. Ag. Soc.

P. S. Will editors throughout the state do us the favor to copy the above.

J. C. H.

MICHIGAN FARMER.

WARREN ISHAM, EDITOR.

PUBLISHED SEMI-MONTHLY.

Terms, \$1 in advance—five copies for \$4.

Two unfortunate ones--what we did say.*Lesson to Wool-Growers.*

The editor of the Prairie Farmer thinks us very unfortunate in our statements about Illinois sheep. And certainly he is not less unfortunate in his statement of our statements. He says, that in speaking of our visit to Mr. Gilkey, we say, that "the large flocks of sheep which have gone to Illinois, have died off."

Now we said no such thing. But what did we say? Well, here it is. "*Mr. Gilkey remarked, that a large portion of the flocks, which, a few years back, have been taken to the prairies of Illinois, have died off for want of shelter in winter.*"

There you have it, neighbor, and that is all there is of it. Now just put this and that together—will you? And then, when you see the wide discrepancy between the two statements, we want you to take your own words, uttered in the same paragraph with the above, in proof, that Mr. Gilkey was not so far wrong in his remark, after all. The words to which we allude, are these: "As we have before stated, there was some mortality among newly immigrated sheep some four or five years ago."

There you have it again: that was just about the time to which Mr. G., more particularly referred—precisely the time when so many sheep were driven to Illinois, and Mr. G.'s sole purpose was to illustrate the importance and necessity of providing shelter in winter for sheep. Will the P. F., deny that the impossibility of providing suitable shelter against the bleak winds of a prairie winter, for such immense flocks of "newly immigrated sheep," upon so sudden an emergency, and in a country which is measurably bare of timber, was one very prominent cause of the mortality which prevailed among them? Mr. G. related to us at the same time, an instance which came under his own observation, of the very great mortality which prevailed among the flocks above alluded to. That was just about the time when he and another individual with whom he was in company, came on with a large flock. When they arrived in Michigan, they divided the flock between them, he, (Mr. G.), remaining with his portion where he now is, and his partner, with his

portion of the flock, taking up his line of march for the Western prairies. Mid-winter came, and with it a message to Mr. G. from his recent partner at the West, that his sheep were dying off by hundreds, and requesting him to come out immediately, and see what was the matter. He went, and found the flock upon a large prairie, and exposed to all the rigors of a prairie winter. He had it immediately removed to the lee-ward side of a grove, and such other expedients were adopted as the emergency suggested. The consequence was, that the mortality was stayed, and the remainder of the flock saved. Are you satisfied, neighbor?

Notes by the Way--No. XIX.

BY THE EDITOR.

In a recent trip to the West many things fell under our observation, which may be profitable to our readers. And we here take occasion, in this public manner, to express our thanks to those gentlemen, to whose casual acquaintance we are indebted for the many pleasant and profitable things, with which the pages of the Farmer have of late been filled. And it is a pleasant reflection, that they have enriched others, by adding to their stock of knowledge, without abstracting any thing from their own. And here we cannot but put a mark upon those intellectual churls, who are so very cautious, in their intercourse with men, not to let drop any thing which will be of any sort of use to them, just as tho' all they imparted in that way, was so much dead loss to them. Pretty specimens of humanity these!

Wreck of the N. Orleans.—Among our fellow passengers, was a young lawyer, who was among the passengers wrecked in the Orleans on Thunder Bay Island. He was at the time, on his way from Vermont to Wisconsin, with a view to settle in his profession, but was now en route for Buffalo, as a representative of his fellow passengers, to present their claims to the owners of the lost boat, for the passage money they had paid. There were about three hundred passengers upon the boat when wrecked, mostly foreign emigrants; and the boat which took them from Thunder Bay, charged them as much as they had already paid for their passage through. He remarked, that the boat was insured for eighty thousand dollars, enough to cover the loss, but that he had facts in his possession sufficient to viciate the insurance, and that he designed to make them public, if they declin-

ed indemnifying the passengers. He said the vessel was going at the rate of twelve knots an hour in a dense fog, when she struck.

He spoke with much feeling of the barbarous treatment of the passengers by the captain, while on the Island. Three dreadful days they had lived without food, and when in this famishing state, some of them were endeavoring to satisfy the cravings of hunger by opening a barrel of dried fruit which lay on the beach, and helping themselves, this unfeeling man came along and drove them away with a club. Immediately after the wreck, he abandoned them to their fate, not even raising a sign of distress.

A New-York Nursery-man.—Among our fellow passengers in the cars we found an intelligent nursery-man (J. Morse, Esq.) from Cayuga, N. Y., from whom we derived some useful hints.

Shortening in.—Among other things, he spoke of the "shortening in" system of pruning as having very great advantages. It made the fruit larger, finer and of better flavor. And when a peach tree runs up and comes to a stand, showing signs of going into a decline, by shortening it in two or three years, it would, he said, be entirely renewed, and put on the vigor of a young and thrifty tree.

The Curculio.—In regard to the curculio, he remarked, that he had uniformly observed, that when he had kept his plum orchard under cultivation, this pest had but very slightly, if at all, molested his plums, but that when his orchard was kept in sward, the fruit was all destroyed. The experience of others, however, may have been different.

The Black Wart.—His remedy for the black wart which sometimes gets into a plum orchard, covers and destroys the trees, is to cut down the infected ones; this stays the plague. Those bearing black skin fruit were the ones thus affected.

Salting Fruit Trees.—Nothing was better as a manure for the plum tree, he remarked, than salt, and in applying it, the ground under the tree should be covered so as to be coated with it. It was also excellent, he thought, for apple orchards, applied at the rate of two or three bushels to the acre. By this application he had entirely renovated crabbed and stunted trees, so that they became thrifty, vigorous growers. There are certain varieties of the apple to which he thought it more particu-

larly beneficial, and among these, he named the Green Newtown Pippin, and the Fall Pippin.

Root Grafting.—He spoke of the practice of root grafting as objectionable on some accounts. The roots all grew on one side, and unless special pains were taken in transplanting, to place the roots so that they would branch out both ways, they would continue so to grow, and the consequence was, that the tree would lean.—Root grafting, he remarked, was practiced because it could be done in winter when there was abundant leisure time, whereas grafting upon common stocks, above the surface, must be done at the busiest season of the year, the season of sales. To obviate both difficulties, he thinks the practice of budding exclusively, should be adopted. It came in August and September, out of sale season, and it made altogether the best trees.

Buds from old and young trees—the difference.—Mr. M., has had in his experience, a striking illustration of the advantage of selecting buds from young trees, for the peach, apricot and nectarine. Great complaints had been made in his neighborhood, that the buds of the above named, were very liable to winter-kill. He had observed, he thought, a difference in this respect, between buds of old and young trees, and by way of experiment, he inserted two lots of buds, side by side, the one lot taken from old trees, and the other from bud shoots of last year's budding. And the result was, that out of a hundred buds taken from old trees, only ten lived, while out of a hundred and fifty taken from the young bud shoots, only five died.

Mr. M. sold all his early peaches at three dollars per bushel, last year, and his peaches averaged through the season \$1 50 per bushel. They were disposed of at Geneva, Seneca Falls, and, we think, Auburn.—They must have been of a high order for excellence.

A change in our staple.—While at Jackson, we suggested to J. Western, Esq., the importance of changing our staple product, or of substituting other staples for the precarious single one on which, as a state, we were placing our almost entire dependence, and not unfrequently to the frequent disappointment of our hopes, and the utter derangement of all our fiscal concerns.

Mr. W., who has several farms under cultivation, remarked, that he had two hundred acres in clover, which he designs to turn under. He has tried his hand a little

at harvesting the second crop for seed, and has succeeded so well with it, that he is fully of the opinion, that it may be made a profitable alternative to come in as a remedy for the failure of the wheat crop. Nearly or quite two bushels of clean seed can be realized to the acre, which is worth from four and a half to five dollars to the bushel, and all this with comparatively little outlay. Mr. W., at the same time remarked, that he had such bad luck with sheep, that he had discarded the idea of placing much dependence upon them.

While we dissent from, and can fully account for, his unfavorable impression in reference to wool-growing, we think his suggestion in regard to the benefits which may be derived from the clover crop, a valuable one. In fact, the benefit thus accruing to the farmer, might almost be regarded as so much clear gain, and the process of harvesting would scarcely at all interfere either with wheat or wool-growing.

In regard to Mr. W.'s impressions of wool-growing, we may remark, that they are just what they might have been expected to be from the circumstances of the case, and just what every man's impressions will be who has so many farms, that he cannot bestow much personal attention upon any one of them, being necessitated to abandon them to the care, or rather to the neglect, of tenants. To succeed at all in wool-growing, a man must, in the first place, be initiated into the mysteries of the art, and in the next place, he must give his personal attention to it.

And would it not be for the interest of our farmers, to divide their attention between the three, and at the same time such other products as may be adapted to particular localities? As we have before remarked, by making wool a staple of our State, instead of diminishing, we should greatly increase its capabilities for wheat-growing. And clovering will do the same, if in harvesting, the heads only are taken off, as is done with a machine invented for the purpose. By falling into such a system then, it appears to us, that the farmers of Michigan would more than treble the profits of their farms. We hope they will take the thing into serious consideration. Surely the sad lessons they have had, ought to teach them the frailty of their dependence upon the wheat crop, and set them to casting about for some thing more reliable on which to rest their hopes.

An Improved Grub Hook.—Mr. Western gave us some account of a grub hook,

which has been put in operation, we think, in Ingham Co., which, from the description, we should judge to be a decided improvement upon every thing of the kind heretofore introduced. It is somewhat as though you should take a common plow beam, with the handles attached to it, and in place of a shire, land side, &c., just substitute the grub hook, and then, with a boy to drive, and a man at the handles, you can take out the grubs as fast as there is any occasion for. That's going it with a rush—indeed it is.

Notes by the Way--No. XX.

BY THE EDITOR.

In the excursion to which allusion is made above, we picked up a great variety of things which we thought it worth while to note down, for the special benefit of our readers. And if so much that is entertaining and useful, can be "gleaned out of" a few passengers in a rail-road car, buzzing thro' the country at the rate of thirty knots an hour, what a mass of information, and what an intellectual sun-light would it pour upon the world, if all the knowledge which is floating about in the heads of all the people of the earth, were collected, sifted, classified, and arranged? A key would thus be furnished with which to unlock any ordinary subject which might present itself for consideration, and the door be thrown wide open, thro' which men might walk right straight into the mysteries of their various arts. And what a pity it is, that all this knowledge, instead of thus being made available to the advancement of human improvement, must be lumbered away in this, that and the other intellectual garret, while the world, for lack of it, goes stumbling along in its darkness, taking lessons from its own sad experience which might thus have been learned in a much pleasanter way—aint it?

A good system of Rotation.—Among our fellow passengers, was an intelligent nurseryman of our own State, A. T. Prouty, Esq., of Kalamazoo. Speaking of the very great benefit to our soil from clovering, he remarked, that the best way to stock with clover, was to put it in with the cultivator upon corn ground, the last time in the season that implement was used in dressing out the corn crop. The next season, the clover should be plastered, pastured and turned under for wheat. And then the same rotation over again. We have seen this system thoroughly tested, and with the happiest results. We have never

seen clover better stocked, or grow more luxuriantly, than a field which was put in with the cultivator in the manner recommended above.

Profit on Sheep.—Mr. P., said he had 26 sheep, and that their wool sold for one dollar per head. Their increase, he remarked, more than paid for their keeping. And then there is the benefit which accrues to the land, which is enriched, subdued, and kept clean by these useful little creatures—a benefit which pays for their keeping over again.

Plaster on Wheat.—Mr. P., mentioned an instance which fell under his observation in Lima, Washtenaw Co., in which the benefit of applying plaster to wheat, was strikingly illustrated. The application was made upon the farm of Mr. Jewett, of Lima, and the difference between the plastered and unplastered portion of the field, was very marked and striking. And yet the same application might be made to another field, perhaps, without any very marked effect. Much depends upon the character and condition of the soil.

Plaster Beds Discovered.—We learned from Mr. P., for the first time, that immense beds of Plaster of Paris have been discovered at Saginaw. If so, the discovery will be of immense importance to the Northern and Eastern portions of the State.

Mr. P. remarked, that the wheat crop was far better in the eastern than in the western part of the state, and that it was better, the state over, than it was last year.

Good and bad husbandry. Among our fellow passengers we found Alonzo Hyde, Esq., the well known temperance lecturer, who has bought and settled upon a farm in Berrien Co. The farm when he purchased it, was badly run down, and there were portions of it so exhausted, that his neighbors laughed at him for thinking to raise crops upon it, and at the same time, the manure lay in heaps about the premises, where it had been accumulating for years, a perfect nuisance.

He went to work and carted out the manure, barnyard and chip, and also quite a quantity of leached ashes, and what straw there was, he spread over the surface and turned under. And now, his crops in the fields, which he was sneered at for thinking of cultivating, are so luxuriant that they are somewhat lodged down. Certainly there is a right way and a wrong way to farm it.

Nothing made in vain.—Our witty friend Munnis Kenny, Esq., of Webster, Washtenaw

Co., who was also along, remarked in the course of conversation, that he was not so much opposed as some farmers were to "the ruffle shirt gentry," for they had their use as consumers, and the farmer could not well get along without them.

Improvement of our flocks.—We learned at Ann Arbor, that one of the best flocks ever brought into our state from Vermont, passed through that place recently. Lemuel Foster, Esq., who resides three miles east of the village, informed us, that he sheared 7½ lbs. from a yearling yew which he purchased from this flock.

A phenomenon in wool growing.—Mr. Foster related a fact, which is certainly of some interest, although it may not be of any practical utility. Col. O. White, of his neighborhood, sheared the same number of sheep last year and this year, viz, 240 each year, and we understood him the same sheep, and the this year's clip weighed 100 lbs. less than the last year's one.—The wool appeared much less gummy this year than it did last. The sheep came out of winter much poorer this year than they did last. That there was less wool on that account, there can be no doubt. But a portion of the deficiency appears to be attributable to there being less gum in the wool. But why was there less gum?—Was it because the sheep were poor. Perhaps friend Peters can tell.

More about this gum.—Gen. Asa Williams, of Lima, as we learned from Mr. F. thoroughly cleansed a merino fleece, which, previous to the cleansing, weighed nine pounds, and after the cleansing, four pounds and a-half, a difference of one half.

Once ploughing for wheat.—Mr. F. said he last season turned under green sward, consisting of timothy, june grass, some white and red clover, &c., and used the cultivator preparatory to sowing his wheat, and that his wheat looked very fine. The same thing has been done by others with equally good effect.

To make the Peach Tree long-lived.—Mr. F. has been grafting the peach into the wild plum, and says it will make the former long-lived, and that its age will be that of the natural age of the latter. If by this means the peach tree can be endowed with a hardy constitution, it will certainly be a great point gained.

An Ohio distiller.—On board was Mr. Ferguson, a gentleman from Dayton, Ohio. He had travelled in Ohio, Virginia, Kentucky, Indiana, Illinois and Michigan, and he remarked that the wheat appeared less

promising in this than in any other of the states above named.

Mr. F. is engaged in the business of distilling, using up corn to the amount of 150,000 dollars worth annually, for which he pays at the rate of about twenty-two cents per bushel. A great corn country that. We inquired how much the farmers generally raised to the acre—he replied, that the southern farmers generally raised from 50 to 60 bushels per acre without bestowing any cultivation upon it—but that some Maine farmers had come in, and they realized a hundred bushels to the acre without difficulty.

One remark of Mr. F. struck us with surprise. He said they did not allow a man employed about the establishment to taste a drop of liquor, for in no other way could they possibly carry on their business. He said he was a strict temperance man himself.

The Chess Question.

Certain difficulties which attend the investigation of this subject, explained and obviated.

We have any quantity of communications on hand relating to the chess question, both pro and con. Among them are two taking ground against the doctrine of transmutation, one from Newton Sheldon, Esq., of Lodi, Washtenaw Co., and one from Linus Cone Esq., of Troy, Oakland County.

We ask these gentlemen to read our reply to Mr. Gibbons, and weigh with candor the argument there presented, and then tell us, whether this question does not put on an aspect which never struck them in the same light before, and whether they have not been led by the false light in which it has generally been presented, to entertain an entire misconception of the whole subject. They are both intelligent men, and capable of appreciating an argument, and at the same time, we believe, honestly intent upon knowing the truth.—We have no fears for the fate of any question when presented in its true light to such minds.

The great fear expressed by both these gentlemen, as by Mr. Gibbons, is that if we should succeed in establishing the doctrine of transmutation, we could not bring a greater calamity upon Michigan. And certainly they are justified in such an apprehension, if the light in which the subject has generally been presented by its opposers, is the true one. And because they have succeeded, to a good degree, in exterminating this pest from their farms, by looking well to their ground and their seed, as di-

ted by the disbelievers in transmutation, they have very naturally been led to entertain a firm disbelief in the doctrine, and to regard it as a dangerous error, especially as they have all along supposed, that its advocates entertain a firm persuasion, that chess seed will not germinate. Entertaining such views, and finding such happy results from the course they have pursued, they have been instant in season and out of season to propagate those views among their neighbors, that all might have the benefit of them. And it has strengthened their convictions to observe, that in many cases, the farms of those who believe in the doctrine, are overrun with chess, while those of others who disbelieve in it, are free from it. And it is certainly a thing not to be wondered at, that these men, regarding the subject in the light in which it has thus been presented to them, should entertain just such views. Here then is the great difficulty which lies in the way of an impartial investigation of the subject. But if the view of the subject we have presented be correct, it is a difficulty which vanishes like the mists of the morning before the rising sun.

And here we take the liberty to press these two intelligent farmers into our service, and make use of them as striking illustrations of the truth of our argument.—They are the very ones to have no chess, if our doctrine be true. Mr. Cone informs us, that he has taken great pains to root it out of his ground, and that he saves all the screenings in cleaning his seed, as carefully as though it was gold dust, for the purpose of destroying it. We conclude also, that he has drained his wet lands, for he gives us to understand that he is "not fool enough to sow wheat on such lands!" All this, as we have shown, our doctrine imperatively enjoins. Good husbandry, like Mr. C.'s, will make clean wheat—bad husbandry the reverse. And while he pursues such a system, it would be marvellous indeed, if his wheat should turn to chess. But, according to his own statement, it is those who neglect thus to fulfill the duties of good husbandmen, who are recreant to their trust as cultivators of the soil, whose wheat turns to chess. Nature, as Mr. C. observes, "is true to her laws," and we add, never fails to inflict a penalty upon all who trample those laws under their feet, as is done by these faithless cultivators of the soil, and this is the penalty to which they are doomed.

And who are the ones to bear witness

to the fact of transmutation, if not these very men, before whose eyes it is exhibited, in testimony of their unfaithfulness to the trust committed to them as the lords of the soil? And on the other hand, who are the ones to discredit such a phenomena, and refuse to be convinced of its existence, if not those, who, having obeyed the laws the natural world, are not doomed to such a curse, and who can say, that "it is contrary to their experience?" See then the plain reason, why each of these two classes of men, are so very positive in their diametrically opposite opinions on this subject.

But the believers in this doctrine are far from being confined to the class first mentioned above. Multitudes of the very best farmers in our country, whose fields are as free from chess as those of any others in the land, men of close observation and careful investigation, believe it. In fact it would seem, that almost the entire body of the intelligent farmers of western New York, believe it, if we may judge from the specimen we have in the article from the Genessee Farmer published in our present number. The editor acknowledges the receipt of eight communications, which he says are all well written articles, from intelligent farmers, every one of which takes strong ground in favor of transmutation, and what is better, they establish its truth by the most incontestible proof. And we know of multitudes of this class of farmers in our own state, as good farmers too as Michigan can boast of, who believe it. But still the reason assigned above, why some good farmers among us, (and many, if you please) do not believe it, viz, that "it is contrary to their experience," holds good in regard to them.

Another thing—nobody ever said, that wheat will *always* turn to chess, even under circumstances most favorable to such transmutation—certainly we did not. What we said was, that wheat sown in wet lands, "will be more likely to produce chess than wheat." But we would rather say *very likely*, instead of "more likely." What we contend for, and all we contend for is, that the transmutation of wheat into chess, does some-times take place, as shown by the most positive testimony, and furthermore, that certain circumstances and conditions are favorable to such transmutation, and certain other circumstances and conditions, are unfavorable to it.

Too much wet, trampling down and stunting the plant when young, and cropping it after it is headed, we know, are circum-

stances and conditions favorable to such a change, and how many other circumstances and conditions, unknown to us, are necessary to co-operate with these to produce the result, we do not know. It is very manifest, that other circumstances and conditions are necessary, from the fact, that when these exist, the change is not always—perhaps only occasionally, effected. Mr. Anderson, whose communication appears upon another page, well remarks, that "there seems to be something in addition to the wetness of the soil, something perhaps in the season, in spring or fall, which co-operates with it to produce the change."

Hence we see how those persons deceive themselves, who make experiments to test the truth of this doctrine, and then settle down into a confirmed disbelief of it, because their experiments have failed to produce the change. To what do such failures amount as an evidence against transmutation? To nothing at all. We should not have wondered at all, if two out of three of the experiments spoken of by Judge Witherell, had failed, and if all three had been failures, it would not have shaken our belief in the doctrine one iota. It would have proved to us, that the accompanying agencies necessary to co-operate in producing the change, were not present, and nothing more. The question is not, whether we can order all the circumstances and conditions necessary to produce the change, but whether under certain circumstances and conditions which we may order, the change sometimes takes place, with the aid of some co-operating agency unknown to us, perhaps in the atmosphere, which, at the time of such change, is present.—Henceforth then, let no such failure be mentioned as an evidence, against the truth of the doctrine.

There seems to be no end to the arguments which rally to the support of this doctrine. After all we have said, and now that we are compelled to draw to a close the second time, there seem to be more considerations gathering around and pressing upon us for utterance in its behalf, all of which must be left unsaid, than we ever dreamed could be summoned to its defence, and we are fairly amazed at the strength of argument with which it is fortified.

In conclusion, we tender our thanks to our good friends who differ from us so kindly. Although they appear to have much feeling on the subject, there is no threat of withdrawing patronage, or any thing of that sort. On the other hand, they seem only to deplore, that a paper upon which they had set so high a value, and from which so much was hoped, should be enlisted in support of a doctrine which they regard as very pernicious in its influence upon the great interests of agriculture; but they did not then know what we had to say in its support.

For the Michigan Farmer.

Various Matters.

Mr. ISHAM—If you insist upon each one contributing his share for the columns of the Farmer, I suppose we "the people" must comply; but still there is left us one spot to rest our free agency upon; we shall do it in our own way. If you ever get this, which at present is rather uncertain, you will find it as erratic and discursive as John Randolph used to make his speeches. I promise not to extend so far as to endeavor to prove any assertion, nor scarcely give a reason, but only throw out hints, perhaps now and then give a slight kick.

And first, I would ask my brethren, what they think about growing so much rye in their wheat? I think the day of repentance is hastening on. I advise you to let the sheep take care of every stalk now on the fallows, then to be careful when you begin to thresh for seed, that every part of the machine is thoroughly cleaned, that you do not get a share of rye from your neighbor, who threshes before you, and next June go all over your wheat and snake out every stool of rye. The last act I have done, and believe there is not one left.

I wish you would give a hint to the makers of pitch forks, that they cheat us a little too bad of late years. The article is perfect in shape, beautiful to the eye, and works easy, but they have found, that there is such a thing as the "benefit of trade," and with a little attention, they can make us buy three within the same time we used to one, they make the shank so small and weak, that I consider it good luck, if, with great caution, I make one live through one season. This is getting to be a general complaint in these diggins, and many now use the rough-shod article made among ourselves.

Please call the attention of our farmers, to the different, best plans of raising corn, and let them tell what they think of making their rows three feet one way, and from nine to twelve the other, for the purpose of letting the sun and atmosphere in more perfectly; the advantage of working the ground with a two-horse cultivator, and of sowing wheat before harvesting the corn if we wish so to do. If the plan is good, some of us will speak after this. If bad, perhaps we will tell you.

In the art of making hay, we have had the best way pointed out so many times, that it would be downright impudence in any man to suggest, that the caution not to dry your timothy too much, is wholly and

totally wrong. When the weather is favorable, and all other things will allow, I dry timothy one whole day, after every man and boy in the field call it too dry already. And this for the purpose of getting brightness of color, absence of dust or smoke, and also adding to the weight. I suppose, many are ready to take issue on the last proposition. I will leave it with chemists to decide which lot will gain weight from the atmosphere, and which will go through with a partial stage of decomposition, and become what we call mow-burnt, and as light as feathers. Suppose you take three parcels of straw, one perfectly dry—another with the sap not dried out thoroughly, and the last, well saturated with water, place them in the middle of a hay-mow, and weigh each separately next winter, and then tell us which method will give the most weight.

And now, brother farmers, this thing must come to a close, and many of you say "the sooner, the better." Perhaps so, when reading I can tell very quick when the writer ought to come up standing; but when writing, I have found myself mistaken, generally. If I had guessed right, my own labor and that of the printer would have been reduced one-half and more. I thought of throwing out a few hints upon the grand object for which we are all making ourselves busy; as a profession or occupation, I think we need not fear contradiction, when we assert, that there is no other so well fitted to give contentment and happiness as ours, and to attain it, we must pass thro' a regular series of moral training, yes, and obey the call not only semi-annually, but daily meeting for drill and exercise. We have all considered our paper as designed to instruct the head and hand, how to grow wool and cabbages, to make fence and dig grubs, shall it likewise be used for training the moral part of the farmer? At present, I decline an answer.

OLD MACK.

Remarks by the Editor.

We welcome "Old Mack" to a place in the corps of our correspondents, and hope he will often enrich the columns of the Farmer with his useful hints.

"Old Mack" is a good friend of the Michigan Farmer, and as such he expresses his apprehensions, lest the praises bestowed upon it by correspondents will spoil us.—But we assure him, that his fears in that respect, are entirely groundless. We have been too long in the field for that, and know too well what we can do, and what we cannot do.

We have occasionally let a laudatory remark of a correspondent slip in edge-ways, rather against our own sense of propriety, from motives which "Old Mack" would fully appreciate, if he knew what we know.

The Michigan Farmer has been struggling for existence, for years, with scarcely the breath of life in it, and for the simple reason, that the mass of our farmers bestowed their patronage upon Eastern Agricultural papers, and would not believe that a paper worthy of their attention, could be made here. When we took charge of the paper, we were determined to break up and scatter to the four winds this miserable superstition, or perish in the attempt. We were told openly and boldly, at the outset, that it was useless to try to sustain a paper of the kind here, for its contents must necessarily be taken from Eastern papers, and of course our farmers would prefer them. But instead of that, Eastern papers for the last eighteen months, have taken more from the Michigan Farmer than the Michigan Farmer has from them.—And it has greatly encouraged us in the desperate struggle, to know, that our efforts were appreciated by the most intelligent farmers of our State. And it is from this class of farmers, men who are judges of such things, that we have received the many flattering testimonials, some few specimens of which we have allowed a place in our columns; and it was for the special benefit of another large class, who always take their cue from such men, think as they think, and judge as they judge, and not at all to gratify any feelings of personal vanity in us. And we supposed the thing was well understood by all who belong to the class first named.

We can mention Eastern Agricultural papers, which keep in whole pages of commendatory notices taken from other papers, from year's end to year's end. We have not come to that yet.

Our correspondent seems not to be aware, that something devoted to moral improvement, has been given in every number of the Farmer. Both the Ladies' and Young Men's Departments, are thus devoted, and we have given much on the subject of education. We have, moreover, often dwelt upon the importance to the farmer of cultivating both the mind and the heart, as well as the soil which he treads, if he would be truly prosperous and happy, and raise his profession to the dignity and importance which he claims for it, but which, hitherto, it has not attained.—Perhaps, however, we have been too sparing in our remarks on the subject, for it is certainly an important one.

For the Michigan Farmer.

Farmer's Exchange---Thoughts for Consideration.

ROMULUS, June 30th, 1849.

MR. EDITOR—

It has often occurred to me that our farming community would find a great advantage from the establishing in each County, (at the County seat, if you please) of a "Farmer's Exchange," where they can meet, say once a month, for the sale, barter, or exchange, among themselves, of certain commodities or articles they may chance to have on hand, and there an exchange take place without a sacrifice to either, and with a mutual advantage to both. To make myself more plainly understood, I will give an example or two. Suppose that in the course of my regular agricultural pursuits, I had by some casual trade or barter, acquired an extra Wagon, Carriage, Horse, Harness, or other articles, of no immediate or practical use to me, and having either of those articles to dispose of, and yet needing very much one or the other of the articles above named, and which I cannot possess, (for want of the means) without running in debt for it, when perhaps, at the same time there may be a dozen chances within the limits of the county, of making an exchange with some neighboring farmer, and thus save incurring a debt, and putting dead capital to a profitable use. And it strikes me that other and still greater advantages might accrue to the agriculturists of our country from having some such place of general resort in each county at stated and regular periods. It is, I believe, a generally conceded opinion and belief, that the breeds of all domestic animals are greatly improved by frequent "Crossings," particularly of Sheep and Hogs. And my own observation has led me to notice it too, in a striking degree, even in the feathered tribe, of dunghill fowls.

Now to make this improvement in the breed of the kinds of stock on our farms, how easy and practical could it be made! for instance, in the crossing of sheep,—let each farmer having a flock, in going to these monthly gatherings, put a buck into his wagon, and there exchange with his neighbor for one of a different blood or stock, which may easily be done without a loss in value to either, but of mutual advantage to both in improving the breed of their respective stock; and so it might be with most or all other domestic animals, by the farmers encouraging among themselves

a disposition for reciprocal change and crossings. I might thus go on, Mr. Editor, *ad infinitum*, in enumerating the benefits, which appear to me to promise good results from this plan, but I should trespass on your time, and extend this article beyond the limits of a newspaper paragraph.

I will now close by giving you, briefly, my ideas of a practical plan for carrying out the scheme.

For the purpose of an experiment, on an economical scale, suppose some individual in each county seat, should open a public house (or cause one already open) to be called "Farmer's Exchange" of Wayne County, (for instance) or such other County as the case might be, and which all the farmers of such County should feel bound to patronize in preference to any other when "going to Town," and let a book of Registry be kept especially for the entry of the name of each farmer within the County, (as he visits the "Exchange,") with the place of his residence, and let him have the privilege also, of entering any short memorandum or notice, having reference to his farm or agricultural pursuits, or offering for sale, barter or exchange, any article he may have to dispose of, and to be exhibited at the "Exchange" on the then next regular meeting day, and that all such entries may be made in a plain legible hand, each notice or memorandum should be handed in to the Landlord, together with a fee of five or ten cents as a compensation for copying it upon the Registry Book.

By this means it might be more a book of reference and of useful information to the farmers of the County, and induce them always to call at the "Exchange," when in Town, and thus become, (as it should be) a place of general rendezvous for the farmer, where he can always meet his neighbor or brother farmer of his own County, and giving each an opportunity of ascertaining such information as he may especially need or desire.

I have thus, Mr. Editor, attempted to give you (as briefly as I know how) my crude ideas of what appears to me, a practical plan to do some good to our farming community, and if it meets with any favor in your eyes, and you should consider it as worth a notice in your paper, I should have no objection to its publication, (*without my name*) or if my article will aid you any, in suggesting something of the kind that may seem to you more feasible, I shall be much more gratified.

Very respectfully,

Your obedient servant,

D. P.

LADIES' DEPARTMENT.

American Ladies.—Perhaps there is no country in the world, where the women are more completely *domestic*, than they are in our own: and none where female influence is more generally felt. This is a most happy circumstance. And it affords a powerful argument in favor of female education. It is trite, I know, but very important to remark, that when ladies are distinguished for domestic habits and virtues, their maternal influence is very great. They mould the hearts, and to a great degree form the understandings of the future fathers and mothers in our country. Now they, who have in their hands so great a part of *early education*, certainly ought to receive that cultivation of heart and mind, which would fit them for the discharge of the very important duties of their station. This is no easy work. It demands skill and judgment as well as attention. Surely preparation ought to be made for it, that it may be done well. Look at the majority of girls of 18, in the country, and see what are their qualifications for a place at the head of a household. But female influence is not only felt in domestic life;—it reaches to every part of society. Every where it ought to be salutary. Our ladies ought to be intellectual as well as sensitive; intelligent as well as affable; *good* as well as *pretty*. No where, indeed, are they more modest, more pure and delicate than among ourselves; but if to these graces of the female character, were added suitable mental improvement, the effect on the whole community would be most happy. A high spirit of literature would pervade our state; and young men would spend that time in study, which now they waste in dissipation. A loftier tone of moral feeling would be awakened, and we might hope to witness the purity, without the extravagance of chivalry.

The Mother.—Scarcely a day passes that we do not hear of the loveliness of woman; the affection of a sister, or the devotedness of a wife; and it is the remembrance of such things that cheers and comforts the dreariest hour of life; yet a mother's love far exceeds them in strength, in disinterestedness, and purity. The child of her bosom may have become an outcast from society, and none may care for or notice him—yet his mother changes not, nor is her love weakened, and for him her prayers will ascend! Sickness may weary other friends—misfortune drive away familiar acquaintances, and poverty leave none to lean upon; yet they effect not a mother's love, but only call into exercise in a still greater degree her tenderness and affection. The mother has duties to perform which are weighty and responsible; the lisping infant must be taught how to live—the thoughtless child must be taught in wisdom's ways—the tempted youth be advised and warned—the dangers and difficulties of life must be pointed out, and lessons of vir-

ture must be impressed on the mind.—Her works, acts, faults, frailties and tempers, are all noticed by those that surround her; and impressions in the nursery exert a more powerful influence in forming the character, than any after instructions. All passions are unrestrained—if truth is not adhered to—if constancy is not seen—if there be want of affection or a murmuring at the dispensations of Providence; the youthful mind will receive the impressions, and subsequent life will develop it; but if all is purity, sincerity, truth, contentment and love, then will the result be a blessing, and it will rejoice in the example and influence of the pious Mother.

YOUNG MEN'S DEPARTMENT.

From the Boston Cultivator.

Economy.

Young men, lay up your money, or spend it in intellectual improvement; you are better able to earn and to learn, than you will be in after life. Be assured, that if you do not contract habits of industry and economy now, you never will. You must *strive* to be industrious and economical, or slothfulness and prodigality will come unbidden. Spend not your money at the confectionary shop or oyster saloon, for that gratifies the sensual part; it is debasing, corrupting, and foolish. If you have money to spare, give it to the poor and needy—that is ennobling, elevating, and manlike. Economize your time; "time is money."—We save bits of rags, &c., to be sold for useful purposes, but scraps of precious time are lost! How our evenings, time spent in waiting for meals, and our Sundays, might be improved in intellectual culture. Economize your thoughts. While in the street, at the plough, or whenever your mind is not necessarily engaged upon your labor, carry on a process of systematic thought. No one, except those who have practiced it, knows the strength it gives the mind. Our mind needs not so much, more *reading*, as more *earnest thinking*. It must be enriched by continual thought.—The heavens above you—the earth on which you tread—your own wonderful structure, are subjects for interesting thought. Let not your thoughts wander to the ends of the earth, but bring them into subjection, as the farmer does the ox he drives. No man can be truly successful without patient thought. C.

GOOD MANNERS.—We know of a young man, slow, sullen, heavy-browed and ungracious, who, when you speak to him, answers as if it were an effort to appear even decently civil; and who, moreover, seems to be quite content and even proud, of his civility. And we lean to the charitable side so far as to think this is nothing more than a bad habit of his, which has insensibly fastened upon him, and that he goes through the world—a world of mutual dependence—little aware of the fact, that so small a thing as his manners is constantly producing impressions, and fast forming a

reputation, such as ten years hence he may regret as the great blunder of his life.

Would it not be well for every young man to remember the truthful anecdote of the rich Quaker banker, who, when asked the secret of his success in life, answered "Civility, friend—civility!" How much does it cost a man, either old or young, to be truly civil in his intercourse with society? Rather, how much does it a young man to form this habit, which, if formed, will set upon him easily, gracefully, and profitably, so long as he lives? Far more, depends on this little often despised, civility to the world, than any other single adventitious circumstance by which men rise and fall. We may look around us, at any time, and see men high in place and power, who have not attained that elevation by force of individual character or great knowledge, but simply from the fact, that the trifling graces of life have not been despised.

GENERAL INTELLIGENCE.

☞ The wheat is represented as being badly destroyed by rust and weevil, in all parts of Ohio, and in western New York. There is some complaint of rust in some parts of Michigan.

☞ Several heads of wheat were left at our office, in our absence, the other day, by whom and where from, we know not, which are full of the larvæ of some insect, burrowed between the hull and the kernel.—We understood that the man said much wheat was destroyed in his neighborhood by these insects. It is the weevil.

Sad Accident at the Depot.—The Central Railroad Depot exhibited a frightful scene a few mornings since. The passenger train, instead of being checked in its speed, and brought gradually to a stand, as usual, came thundering into the depot under a full head of steam, smashing two or three cars to splinters, killing some, and frightening all. It was very fortunate, however, that only three were killed, two instantly, and one who survived a short time. The verdict of the jury was, that the engineer, being now upon his first trip with the passenger train, did not know how to regulate the steam in coming in, that the train was under more than usual headway. It seems that the brakeman applied the break in vain. This, we believe, is the first accident of any magnitude, which has ever occurred upon this road. Too much praise cannot be awarded to those who have had the management of it, for the circumspection and caution they have generally used.—We learn that one of the men killed, left a family, for which Mr. Brooks provided quarters, and which he has sent to their destination in the State of New York, with a donation of five hundred dollars.

Distressing Accident at the Niagara Falls.

Last evening at a quarter before 8 o'clock, while a party of ladies and gentlemen were visiting the Luna Island, among whom were the lady and little daughter of Mr. DE FOREST, and young CHAS. C. ADDINGTON, and several others, and while the

little girl was standing on the bank of the river, and only some 20 feet from the falls, and holding by the hand of a young gentleman whose name I have not learned—

Young Addington came up and said playfully, "I am going to throw you in," touching her lightly on the shoulder—when she sprang forward with a sufficient force to slip from the hand of the gentleman who held her.

She was instantly followed by young Addington, who caught her, and in the effort was prostrated by the force of the water, throwing the little girl at the same time so near the shore that the young gentleman who had her by the hand nearly caught her, but lost his balance, only saving himself by catching hold of some bushes on shore. In an instant young Addington and the girl were swept over the Falls.

BATTLES IN HUNGARY.—The *London Globe*, of the evening of the 22d, says: "We have intelligence from Vienna to June 16. The general news is, a tremendous encounter with the Hungarians. The Austrians and Russians are said to have been completely defeated, and to have left on the field the fabulous number of 23,000 killed. The battle took place on the 13th, 14th, and 15th, on the large plain between Raab and Wieschburg. It lasted 64 hours. The loss of the Magyars is stated at 8,000. The Austrians were commanded by Haynau; the Russians by Rudiger, and the Hungarians by Georgey.

Another affair, which must not be confounded with the above, is mentioned as having occurred at Czorna. A brigade was sent by Schlick from Ogdenburg, under Gen. Wyss, in that direction. Gen. W. was taken prisoner, and the Uhlar Colonel, Baron Zessner killed. Schlick sent out this brigade to cover his right flank, as he was marching to Raab. It was beaten on the 13th ult. Some reports represent this whole brigade as having been destroyed. Others say that 4,000 men have deserted, *en masse*, from the Schick to the Magyars. What is certain, carts of wounded, for three days, have been continually pouring into Presburg, and the places about.

The only mention, or rather allusion, which can be gleaned from Vienna papers, in regard to the great battle reported, in private letters, to have taken place near Raab, is the surmise that the defeat of Wyss brigade has given origin to fabulous rumors. On the other hand, the authorities maintain that the route of Wyss was only an episode of the other battle.

A letter of the 13th ult., from Cracow, in the *Breslan Gazette*, mentions an affair between the vanguard of the Magyars and the Russians, within the Gallician frontier at Jardanow. The Russian Colonel Magden was killed, two hundred Cossacks cut off and taken prisoners. Another letter of the 15th, from Cracow, mentions, as a report, an engagement at End-Pass, between the advanced guard of the Russians and Bem. The Russians were beaten.

DETROIT PRICE CURRENT.

Flour, bbl.	3 62	3 75	Salt,	\$1 12	
Corn, bus.		35	Butter,		12
Oats,		22	Eggs, doz.		14
Rye,		34	Hides, lb.		36
Barley,		36	Wheat, bus.		70
Hogs, 100 lbs	3 50	4 25	Hams, lb.		6
Apples, bush		1 00	Onions, bu.		50
Potatoes,		62	Cranberries,		1 75
Hay, ton,	8 00	10 00	Buckwheat 100lbs.	1 50	
Wool, lb.		14	28	Indian meal, "	75
Pras, bu,		1 00	Beef, do	2 00	2 50
Beans,		1 00	Lard, lb. retail,		7
Beef, bbl.	6 00	7 00	Honey,		10
Pork,	10 50	11 50	Apples, dried,		75
White fish,	6 00	6 50	Peaches, do		2 00
Trout,	5 50	6 50	Clover seed, bu.		4 50
Cod fish, lb.		5	5	Herd's grass do	1 00
Cheese,		a7	Flax do		75
Wood, cord	2 a	25	Lime, " bbl		7

**Wheeler's Patent Improved Portable
RAILROAD HORSE POWERS,
AND
OVERSHOT THRESHERS & SEPARATORS.**

F. F. Parker & Brother, Detroit,
Agents for the State of Michigan.

We do not hesitate to commend these *Horse Powers* to Farmers, Mechanics, and others desiring such machines as being the most convenient, and superior to any others now in use.

The power itself occupies very little space, and is operated wholly, if desired, by the weight of the horse; the Power being placed at an angle of ten or fifteen degrees only, according to the weight of the horse, which is found sufficient for threshing all grains, sawing wood, &c. It is comparatively light and portable, and can readily be handled by two men, and used on any common threshing floor, thereby securing ease and safety to both man and beast during stormy weather. The moving parts are very simple, as sufficient speed for all purposes is obtained with one shaft, without gearing, thus avoiding a great amount of friction which is unavoidable in most other machines in use. The Thresher is new in many respects, and has several important advantages over most others. By having an overshot cylinder, it admits of a level feeding table, and the person feeding it stands erect, also has control of the horse, and by means of a brake, the power can easily be checked or stopped by him with perfect safety, thereby often avoiding accidents. By this overshot motion, all hard substances are prevented from getting in, avoiding the danger of spikes being broken and thrown out—not an instance being known of such an accident. By this machine the grain is not scattered, but thrown upon the floor within three feet of it, and admits a Separator to be attached sufficiently high from the floor for all the grain to fall through it, while the straw is carried quite over in good condition for binding—the straw not being cut or grain broken. The cylinder is considerably less in diameter than most machines in use, and has only about one third as many spikes, but double the number in the concave, which admits of greater speed with the same power. It is also several inches longer, which gives ample room for feeding it to much better advantage. The Separator has been sold with each Thresher, and is considered indispensable, as it makes a perfect separation of the straw and grain, leaving the latter in the best possible condition for the fanning mill. Three men, with a single Power, can thresh 75 to 100 bushels of wheat or rye, or four men, with a double power, 175 to 225 bushels of wheat or rye, or double that quantity of oats or buckwheat per day; and with fanning mill attached to the Power, and one man to attend it, the grain can be cleaned for market at the same time.

They can be taken apart and packed very compactly, and forwarded to any distance by canal, railroad or wagon. The single Power, with Thresher, Separator, etc., weighs nearly 1100 lbs.; the double Power, with the other apparatus complete, weighs nearly 1700 lbs.

We have a great number of recommendations of these *Horse Powers*, from persons using them, sufficient to satisfy the minds of those wishing to purchase. They are warranted to do execution according to the foregoing statements.

For sale at our Agricultural Warehouse in this city.
July 6, 1849. F. F. PARKER & BRO.



PATENT PREMIUM PUMPS.—The subscribers have just received an assortment of these celebrated pumps for wells and cisterns. For sale at the agricultural warehouse and seed store, by
SPRAGUE & Co,
June 1, 1849. 30 Woodward Ave.

HAYING TOOLS.

Scythes Hand Rakes
Snaths Horse Rakes
Scythe Stones 2 and 3 tine Forks.

Of the very best qualities, for sale wholesale or retail, at the Agricultural Warehouse and Seed Store, by
SPRAGUE & CO,
No. 30 Woodward Avenue.

All orders from the country promptly attended to.
June 12, 1849.

THERMOMETRIC CHURN.—The subscriber, having purchased the right to make, vend and use the Thermometric Churn, (of which A. & W. A. Crowell are the inventors and patentees,) in the counties of Wayne, Oakland, Washtenaw and Monroe, Michigan, is intending to commence the manufacture of them soon, and will be able to supply all who may desire to avail themselves of the benefits of an improvement which is fast working a revolution in butter-making throughout the country.
WILLIAM H. HANFORD,
Canton, Wayne Co., Mich. may 15.

**REAL ESTATE AGENCY,
DETROIT AND LANSING, Michigan.**

THE undersigned have unequalled facilities for the purchase and sale of Real Estate, the payment of Taxes, reclaiming Lands sold for Taxes, the purchase of Lands at Tax Sales, the examination of Titles, the Entry of State or Government Lands, the examination and platting of Lands, leasing city and village property, and collecting Bonds, Mortgages, and other evidences of debt; the purchase and sale of Michigan State Liabilities, &c.

They have careful and trustworthy Agents at the principal places in Ohio, Indiana, Illinois, Wisconsin, and Iowa, and in each of the organized Counties of this State, and have also township plats of nearly all the towns of the State.
May 15, 1849. **MACY & DRIGGS.**

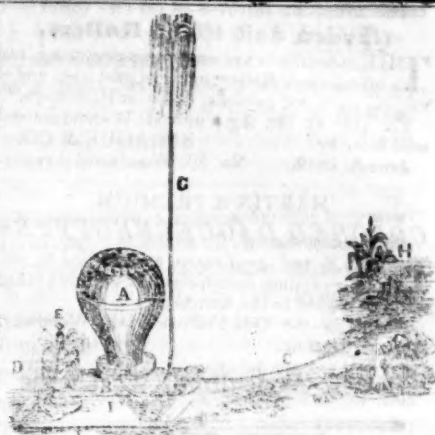
MILL, PLATFORM, AND COUNTER
Scales Warranted, any size and pattern, for sale by
SPRAGUE & CO.,
Agents for the Manufacturer.
No. 30 Woodward Ave., corner Woodbridge street.
April 22

TUBS, PAILS, AND CHURNS For Sale by
SPRAGUE & CO.,
Agents for the Manufacturers.
No. 30 Woodward Avenue, corner Woodbridge street.
April 23

Detroit Seed Store.

F. F. Parker and Brother offer for sale a full assortment of Garden, Field and Flower Seeds and Agricultural Implements, Ploughs, Corn Shellers, Seed Plants, Straw Cutters, &c. &c.
F. F. PARKER & BRO.
June 1 Agents Genesee Seed Store.

DRY GOODS AND GROCERIES, CHEAP FOR CASH.
We have constantly on hand one of the largest and best stocks of Goods in Detroit. Thankful for the very liberal patronage of our friends, we solicit its continuance.
HOLMES & BARCOCK,



WATER RAMS of the most approved construction, for sale low at the agricultural warehouse and seed store by Sprague & Co. 30 Woodward Avenue.
June 1, 1849.

IMPORTANT TO FARMERS.

**Horse Power Threshing Machines
AND SEPARATORS.**

FROM ONE TO SIX HORSE POWER.

THE subscribers are Agents for Michigan for several kinds of the above Machines. The most of the machines which we are prepared to contract for, are well known throughout the State by all our farmers, and are not a new thing that they will be required to try and test before they are satisfied that it is a good one. Our Machines will be sold on the most liberal terms, and references will be given to nearly all the heavy farmers in this State if required, as to their practical utility. We are now prepared to contract any number of Machines, and of various sizes, from one to six horse power.

We are also prepared to sell at low rates **HULLERS AND CLEANERS**, for cleaning all kinds of grain, clover and other seeds, of the most improved kind. In selecting for this market, machines of the above description, we have been very careful, after visiting the various manufactories and examining the various patents, to select none but the very best Machines that are made in the United States. No catch-penny affair, because, it is recommended highly in certificates, will be brought to this market, nor be offered to the Michigan farmers by the subscribers. On the contrary our customers may rely upon our Machines as being the very best that can be found.

For sale at
SPRAGUE & CO,
Agricultural Warehouse,
No. 30 Woodward Avenue.
Detroit June 8, 1849

FLAX SEED.

CASH and the highest market price paid for Flax Seed, delivered at the Agricultural Warehouse and Seed Store of
SPRAGUE & CO,
June 13, 1849. 30, Woodward Avenue.

STOVES AND

AGRICULTURAL IMPLEMENTS.

THE subscribers offer for sale, on reasonable terms, a general assortment of Stoves, tin, copper, sheet iron, and hollow wares, of every description. Also an assortment of agricultural implements, including Peekskill, Eagle, Wisconsin, and Michigan plows, cultivators, cradles, scythes, hoes, rakes, shovels, scrapers, forks,—churns (atmosphere,) wash boards, &c. &c.

D. O. & W. PENFIELD.

AGRICULTURAL IMPLEMENTS.—Plows, harrows, hay, straw and manure forks, shovels and spades, hoes, hay and horse rakes, grain and grass scythes, snaths and cradles, road scrapers, corn shellers, hay and straw cutters, corn and cob crushers, sugar mills, pruning and garden tools, churns, well wheels, corn knives, flails, saws, axes, &c. &c. of the best manufactures, just received and for sale wholesale or retail, at the agricultural warehouse and seed store, by
SPRAGUE & Co.
June 1, 1849. 30 Woodward Ave.

GARDEN SEEDS.

A Fresh and general assortment of warranted garden seeds for sale by the package or paper, at the agricultural warehouse and seed store, by
SPRAGUE & Co.
June 1, 1849. 30 Woodward Ave.

Garden and Field Rollers.

THE subscribers are now manufacturing and offer for sale Rollers made of cast iron, and of various sizes, for gardens, fields or Highways.

For sale at the Agricultural Warehouse and seed store by
SPRAGUE & CO.
June 8, 1849. No. 30, Woodward Avenue.

**MARTIN'S PREMIUM
COLORED DAGUERREOTYPES.**

LADIES and gentlemen are invited to call and examine specimens. Miniatures taken without regard to the weather.

Rooms in the Odd Fellows' Hall, Woodward Avenue, Detroit.

**Detroit Agricultural Warehouse
AND
SEED STORE.**

SPRAGUE & Co. dealers in Agricultural and Horticultural Implements, Horse Powers, Smut and Threshing Machines, Flower, Field and Garden Seeds, Bulbous Roots of all kinds, Fruit trees and Shrubbery, No. 30, Woodward Avenue, corner Woodbridge-st. Detroit, Mich.

The highest market price paid for grass and clover seed, dried apples, &c. &c. Consignments of pork, lard, butter, and produce generally respectfully solicited and promptly attended to. Country dealers supplied at manufacturers' prices. All orders by mail or otherwise faithfully executed. Our assortment will be found on examination, to comprise every thing wanted for use by the farmer, the dairyman and the gardener.

Farmers and dealers are cordially invited to call and examine our stock after the 20th of April, when we shall open the establishment. Any thing not comprised in our catalogue, which is called for, will be promptly furnished without any additional expense to the purchaser.

Resolution

Passed unanimously by the "State Agricultural Society" of the State of Michigan:

Resolved, That we are gratified to learn that Messrs. Sprague & Co. are establishing in Detroit, a warehouse for keeping improved agricultural machines and implements, and the choicest variety of seeds for gardens and farms, adapted to the wants of the people of this state, and hope that people living in Michigan will appreciate the benefits of such an establishment within our limits, and give it their patronage.

EPAPHRO. RANSOM, Pres't.

A. W. HOVEY, Secretary.
March 24, 1849, if

Great Northern Route

BETWEEN THE EAST AND THE WEST,
BY WAY OF THE MICHIGAN CENTRAL RAILROAD.

WILL Commence operation on the opening of navigation, by which passengers will be taken between Chicago and Buffalo, in from 30 to 45 hours, and to New York in from 55 to 70 hours, shortening the time between Chicago and Buffalo to less than one-third that of any other route.

A Steamboat will leave Milwaukee every morning, and Chicago every morning and evening for New Buffalo, (the western terminus of the Railroad,) which with the Cars to Detroit, and Steamboats to Buffalo, will form two daily lines from Chicago to Buffalo, connecting directly with the Cars from Buffalo to Albany, and Steamboats to New York, or Cars to Boston.

Going west, a Steamboat will leave Buffalo every morning and evening, running from the Cars of the Albany and Buffalo Railroad, for Detroit, thence by Railroad to New Buffalo, and by Steamboat from the morning train at New Buffalo to Milwaukee and other ports, and from both trains to Chicago, connecting with the line of large Packets on the Illinois and Michigan Canal to La Salle, thence by the Express line of first class river Steamboats to St. Louis, and by the lower river Steamboats to towns on the Mississippi, and New Orleans. J. W. BROOKS,
Sup't Michigan Central Railroad.

PETERS'**BUFFALO WOOL DEPOT—THIRD YEAR.**

I have established a Wool Depot upon the following plan. 1st. The wool is thrown into 10 sorts; Merino wool being No. 1, the grades numbering down from 1 to 5; the coarsest common wool being No. 5. Saxony wool is thrown into extra, and prime 1 and prime 2. Combing and De Laines make 2 sorts more. 2nd—I charge for receiving, sorting and selling, one cent per pound; this includes all charges at the Depot, except insurance. 3rd—Sales are made for cash, except when otherwise directed by the owner.

All wool consigned to me should be marked with the owner's name. Warehouse, corner of Washington and Exchange streets.

Buffalo, Jan. 1, 1849. T. C. PETERS.

**Grosse Isle Institute,
FOR THE EDUCATION OF BOYS.**

REV. M. H. HUNTER, an Alumnus of Yale College, Principal.

This is a Select School in which boys are taught all the usual branches of a liberal education, including the classics, mathematics, &c.

The School year consists of three terms, the first extending from the 1st of September to Christmas; the second from the first of January to the first of April; and the third from the 1st of May to the 1st of August.

TERMS.—For tuition, board, &c., \$150 per year, in advance, as follows: 1st term, \$58; 2d term, \$46; 3d term, 46.

REFERENCES.—Rt. Rev. S. A. McCoskry, D. D., and Hon. Elton Farnsworth, Ex-Chancellor of Michigan, Detroit.

For fuller information see Circular.

April 1st, 1849.

SEEDS, GARDEN AND FIELD, Warranted fresh, for sale by the pound or paper, by
SPRAGUE & CO.,
No. 30 Woodward Ave. corner Woodbridge street.

New Publishing House,

AND WHOLESALE BOOK & STATIONERY STORE
THE undersigned begs to inform book buyers, book sellers, teachers and dealers in books, stationery, and paper hangings, borders, fireboard views and window paper, that they have this day opened an extensive Book, Stationery and Paper Hanging Establishment, which comprises a general assortment of books in the various departments of literature, and where a full stock of school and classical books, (in general use,) LAW, MEDICAL and THEOLOGICAL WORKS, Miscellaneous Books and Paper Hangings, in great varieties, can be had at eastern prices.

Their facilities as publishers enable them to offer books on as reasonable terms as any of the eastern houses. Orders from the country respectfully solicited and promptly attended to. Citizens and the public generally are invited to call and examine our stock, as we feel confident inducements are offered to purchasers rarely met.

F. P. MARKHAM, 170, Jefferson Avenue, Detroit.

Michigan Book Store.

C. MORSE & SON, wholesale and retail dealers in BOOKS AND STATIONERY, continue business at the old stand, on Jefferson Avenue, Detroit. They respectfully invite Country Merchants and Teachers, to their extensive stock of SCHOOL AND CLASSICAL BOOKS, embracing every kind in use. Their assortment of Miscellaneous Books is very large, and in good bindings, from which a better selection can be made for TOWNSHIP AND FAMILY LIBRARIES, than at any other establishment.

They also keep on hand, all kinds of English and American STATIONERY; fine Foolscap and Letter Paper; Printing Paper, (superior quality;) Printing Ink, Wrapping Paper, &c. &c. Also, Medical and Law Books. jan. 15, 1849

WHOLESALE & RETAIL.

A.LEX. McFARREN, Bookseller and Stationer, 137 Jefferson Avenue, (Smart's Block,) Detroit, keeps constantly for sale a complete assortment of Miscellaneous, School and Classical Books; Letter and Cap paper, plain and ruled; Quills, Ink, Sealing wax, Cutlery, Wrapping paper, Printing paper of all sizes; and Book, News and Canister Ink of various kinds; Blank books, full and half bound, of every variety of ruling; Memorandum Books, &c. To Merchants, Teachers and others buying in quantities, a large discount made. Sabbath School and Bible Society Depository. jan. 1.

ANTHONY & EMERSON'S DOUBLE ACTING ROTARY CHURN.—The undersigned offers this Churn to the inhabitants of this State, confident that it will every way equal the representations made of it, as a useful and labor-saving machine, producing butter from sweet milk in from five to twelve minutes, and from cream in a much shorter time.

Churns can be had at prices from \$2.50 to \$6, capable of churning from 7 to 40 quarts of milk or cream. Also, county rights to manufacture, for sale low.

T. G. STAGG,

At Parker & Brother's, Woodward Avenue, Detroit.

Ready Made Clothing.

THE Subscribers are now prepared to offer at their well known "Emporium," one of the largest and most complete assortments of Ready Made Clothing ever offered in this city. Being manufactured under their own immediate inspection, they can warrant it of the best material, workmanship and style. Their goods having been recently purchased at the unprecedented low prices at which goods are now selling in the New York and Boston markets, they are consequently enabled to offer all descriptions of garments most astonishingly low. Among their stock may be found: Broadcloth Coats; Cloth, Cassimere, Tweed and Blanket Overcoats; Cloth, Cassimere and Tweed Frocks, Dresses and Sack Coats. All descriptions, qualities, and styles of Cloth, Cassimere, Prince Albert Cord, Tweed and Sattinet Pantalons, Suits, Velvet, Cashmere, Silks and Cassimere Vests, Gooden's India Rubber Goods, in all their varieties, together with a large stock of Shirts, Drawers, Stocks, Cravats, and Hosiery, of all descriptions.

Persons in want of any description of Gentleman's wearing apparel, will find it to their advantage to call before making their purchases, as they are determined to sell both at Wholesale and Retail, at prices which cannot fail to give satisfaction. Call and satisfy yourselves, at the old store, corner of Jefferson and Woodward avenues.

jan. 1. HALLOCK & RAYMOND.

THE Very best assortment of DRY GOODS, BONNETS & RIBBONS, Groceries, Paper Hangings and Window Shades may be found at Wholesale or Retail, at

JAMES A. HICKS',

130 JEFFERSON AVENUE, DETROIT.

At prices that will defy competition. A general assortment of housekeeper's articles, consisting in part of Carpets, Feathers, Marseilles Quilts, Blankets, &c., always on hand. Tea and Coffee drinkers are particularly invited to examine his 4s Young Hyson and Gunpowder tea, and his Coffee and Sugar, for he feels confident they will pronounce these articles the best in the market for the price.

TO THE PUBLIC.

I am back again from the East, and have up my old Sign, "New York Dye-House," Woodward Avenue, next to W. K. Coyle's store, and opposite the old Depot. I am fully prepared, as heretofore, to

DYE SILK, WOOLLEN AND COTTON.

Merino Shawls cleaned and dyed; Moreen Curtains, white Kid Gloves, Carpets, &c., &c. cleaned. Gentlemen's faded Clothes cleaned and dyed in Eastern style, and Woollen Yarn dyed to any pattern.

Detroit, Jan. 1, 1849. H. A. YOUNG.

DYEING & SCOURING.—The subscriber, having opened a dyeing establishment North side of Jefferson Avenue, (corner of Jefferson Avenue and Shelby Street,) nearly opposite the Michigan Exchange, is prepared to execute orders of every description in his line of business, and in a style which has never been surpassed in the Western country. Shawls, Scarfs, Merinoes, China crapes, and every species of foreign fabric, dyed and finished in the best style. Moreens and Damask curtains, dyed and watered. Gentlemen's wearing apparel scoured, and the colors renovated or dyed, without taking the garment apart.

M. CHAPPELL.

DETROIT, Oct. 7, 1848.

TERMS.—The MICHIGAN FARMER is published twice a month, by WARREN ISHAM, at one dollar a year in advance; after three months, \$1.25; after six months, \$1.50; after nine months, \$1.75. No subscription taken for less than one year, nor discontinued till all arrearages are paid. To clubs, five copies for four dollars.

Office on King's corner, third story.

**PRINTED BY GARRETT & GEIGER,
BOOK AND JOB PRINTERS,
Corner of Jefferson and Woodward Avenues,
DETROIT.**